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OTHER HUMAN RIGHTS ISSUES

Human rights and weapons of mass destruction, or with indiscriminate effect, or of a nature to cause superfluous injury or unnecessary suffering

Working paper submitted by Y.K.J. Yeung Sik Yuen in accordance with Sub-Commission resolution 2001/36*

* The present report exceeds the page limits set by the General Assembly. Therefore, the executive summary only is being translated into all the official United Nations languages. The annex is being circulated in the original language only. The report was submitted after the date set by the General Assembly to allow an appropriate time to complete extensive research.

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Executive summary

The present working paper is submitted pursuant to Sub-Commission decision 2001/36 in conjunction with Sub-Commission resolutions 1997/36 and 1997/37. In resolution 1997/36 the Sub-Commission expressed concern over the use of particular weapons of mass destruction or with indiscriminate effect, or of a nature to cause superfluous injury or unnecessary suffering, naming specifically nuclear weapons, chemical weapons, fuel-air bombs, cluster bombs, biological weaponry and weaponry containing depleted uranium. In that resolution the Sub-Commission also expressed its conviction that the use or threat of use of those weapons was "incompatible with international human rights and/or humanitarian law" and requested Sub-Commission member Ms. Clemencia Forero Ucros to prepare a working paper on that topic. Resolution 1997/37 added the issue of illicit transfer of these weapons to the mandate. Decision 2001/36 authorized Mr. Y.K.J. Sik Yuen to prepare the present working paper.

Part I of the working paper addresses the human rights and humanitarian law at issue whilst Part II addresses the weapons themselves.

In analysing the human rights likely to be infringed by the use of the listed weapons and categories of weapons, emphasis is placed on the right to life, the right to freedom from torture, the right to health and well-being, the prohibition against genocide and related rights contained in the primary human rights instruments. Emphasis is also placed on article 2 of the Charter of the United Nations owing to the obvious "threat power" of States in possession of these weapons.

Analysing humanitarian law, the author first explains the importance of both treaties and customary humanitarian law as sources of law relating to weapons. The major provisions of the Hague Convention No. IV of 1907 and its annexed Regulations respecting the Laws and Customs of War on Land, beginning with the Martens Clause, article 22 on proportionality, and article 23 prohibiting poisonous weapons and weapons causing unnecessary suffering are presented. The Charter and the Statute of the International Court of Justice (ICJ) are cited as supportive of the strong role of customary humanitarian law. The major provisions relating to weapons that are contained in the Geneva Conventions of 1949 and the two Additional Protocols are considered. Special attention is drawn to common article 3 of the Geneva Conventions in the light of the indication of the ICJ that this provision is a "common yardstick" in any armed conflict, whether or not a particular State is a party to an armed conflict. Reference is made to the numerous provisions of Additional Protocol I that limit the types and uses of weapons. Stress is placed on the provision mandating States to determine prior to development and use of weapons whether a proposed weapon would violate any existing humanitarian law. This rule is considered by the ICJ as a rule of customary humanitarian law. The articles relating to the protection of the environment are also considered. Discussion of relevant provisions of the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, its Protocol and the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and Their Destruction concludes the review of the instruments.

In the light of humanitarian law from all sources, the author concludes that weapons are to be considered banned if their use:

(a) has indiscriminate effects (no distinction between civilians and belligerents);

(b) is out of proportion with the pursuit of legitimate military objectives;

(c) adversely affects the environment in a widespread, long-term and severe manner;

(d) causes superfluous injury and unnecessary suffering.

Part II deals with the evaluation of the weapons themselves, beginning with nuclear weapons. Action at the General Assembly, the 1996 Advisory Opinion of the ICJ on the legality of the threat or use of nuclear weapons, numerous international treaties and scientific studies are reviewed. Regarding the use, transfer and stockpiling of nuclear weapons, the author finds serious double standards, lacunae and other flaws, inexplicable except for political reasons, given that nuclear weapons could not be used in any way that is compatible with the four-part test set out in Part I.

"Mini-nukes" and "bunker busters" are next presented, especially the B61-11. Alarm is expressed at the instruction of the Nuclear Posture Review of the United States that includes plans for "first use" against seven States, five of which are not States having nuclear weapons. The author finds the instruction contrary to human rights and humanitarian law, even relating to "mini-nukes" or the depleted uranium-fortified "bunker busters".

In the review of biological and chemical weapons, the major biological and chemical compounds are identified and the two major treaties banning the production, storage and use of these weapons are evaluated. The author draws attention to some of the weaknesses of the treaties, but then invites comparison with the absence of a similar "banning" treaty in regard to nuclear weapons, pointing out that chemical and biological weapons are the "poor man's nuclear weapons" and that the nuclear weapons States are few.

The author evaluates anti-personnel mines, cluster bombs and fuel-air explosives under the section "Weapons of indiscriminate effect", beginning with further provisions from Additional Protocol I relevant to such weapons. Regarding anti-personnel mines, the author focuses on those that are not manually detonated. Following a brief description of some provisions of the Anti-Personnel Mines Convention, he notes major Powers that have not ratified it.

Turning to cluster bombs, the author indicates that the bombs' "submunitions" can saturate an area as large as several football fields. He stresses both the impossibility of containing them and the fact that if undetonated at delivery (cluster bombs have a high failure rate of between 5 and 30 per cent), they may detonate long after the armed conflict is over. The undetonated-at-delivery cluster bombs become, essentially, land mines. Places where cluster bombs have been used in combat are identified. Some of the latest cluster bombs, which

includes "combined effects munitions" having light armour, anti-personnel and incendiary effects, are described. The author points out that the International Committee of the Red Cross has called for a moratorium on cluster bombs.

Regarding fuel-air explosives (also known as "hypo-barometric" because they are activated by air pressure and "daisy cutters" from the shape of the crater they leave), the author focuses on the BLU-82 (nicknamed "Big Blue"). The third generation fuel-air explosives use uranium powder. Owing to the sheer scale of the explosions from fuel-air explosives currently in use, the author concludes that they could not be used without indiscriminate effects. Further, he has found that scientists are expressing concern that use of fuel-air explosives in the Balkans and Afghanistan might have triggered earthquakes in those regions.

The author finds that he cannot list all possible weapons that could be viewed as weapons causing superfluous injury or unnecessary suffering, but points out that all the weapons under consideration in the paper would fall equally under both categories.

An extensive evaluation of weaponry containing depleted uranium is then presented. Depleted uranium is defined and places where it has been used in combat are indicated: the Gulf region, the Balkans, possibly in Afghanistan and allegedly in the Middle East. The author points out that depleted uranium is included as class 2 material in the Convention on the Physical Protection of Nuclear Materials, but as there is no specific treaty banning depleted uranium, its legality must be determined in terms of the rules set out in the paper, including evaluation prior to use. The author then sets out basic properties of depleted uranium with attention to the fact that it is pyrophoric (highly flammable) and when it burns it has an "aerosol" effect: the main reason that depleted uranium weapons are so deadly and indiscriminate. Depleted uranium particles in aerosol form when inhaled into the lungs will stay for many years, emitting radiation. Winds can cause depleted uranium that has settled to re-enter the air many years later.

The paper catalogues a number of incidents and studies showing the deaths and serious illnesses related to inhalation of depleted uranium - the key medical effects being cancers of those exposed and birth defects of children born of those who have inhaled depleted uranium. Illnesses reported by Gulf war veterans in the United States, United Kingdom and Iraq, and Iraqi civilians mirror the known medical effects of low-grade radiation poisoning. The author also shows that the users of depleted uranium have tried to keep the effects of depleted uranium secret and identifies a number of flawed studies (one by a military contractor) and misdeeds. He also points out that owing to pressure from Gulf war veterans and others, there are several important initiatives under way, including action by the World Health Organization, the United Nations Environment Programme and the United Kingdom Ministry of Defence. The author concludes this section with a list of some of the many calls for a moratorium on the use of depleted uranium munitions.

The author concludes with the plea that peace and security cannot be achieved by the use of these horrific weapons, but rather only by adhering to humanitarian law and human rights. He also expresses concern about "space" weaponry, which he was unable to include in this paper.

Annex

HUMAN RIGHTS AND WEAPONS OF MASS DESTRUCTION, OR WITH INDISCRIMINATE EFFECT, OR OF A NATURE TO CAUSE SUPERFLUOUS INJURY OR UNNECESSARY SUFFERING

Working paper by Y.K.J. Yeung Sik Yuen

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Introduction

The mandate

1. In its resolution 1996/16 of 29 August 1996, the Sub-Commission on the Promotion and Protection of Human Rights expressed its concern that weapons of mass destruction or with indiscriminate effect may be used against both armed forces and the civilian population with serious consequences of death, injury or disability. It also expressed concern about serious long effects of certain weapons both in terms of human life and for the environment. Further, the Sub-Commission expressed its conviction that the production, sale and use of such weaponry is incompatible with international humanitarian law and human rights. Calling on States to eliminate, in particular, a number of named weapons, including weaponry containing depleted uranium, the Sub-Commission requested the Secretary-General to seek information from a wide range of sources on these weapons and to prepare a report to be presented to the Sub-Commission at its forty-ninth session.

2. The Secretary-General submitted his report (E/CN.4/Sub.2/1997/27) to the Sub-Commission at its forty-ninth session.[1] The Sub-Commission, in its resolution 1997/36 of 28 August 1997, reiterated its concerns about these weapons expressed in its resolution 1996/16 and authorized Sub-Commission member Ms. Clemencia Forero Ucros to prepare a working paper on this topic. In its resolution 1997/37 of 28 August 1997, the Sub-Commission decided to include the question of illicit transfer of arms into the working paper.

3. In its decision 2001/36 of 16 August 2001, the Sub-Commission, recalling its resolutions 1997/36 and 1997/37 of 28 August 1997, authorized Mr. Y.K.J. Yeung Sik Yuen to prepare, without financial implications, in the context of human rights and humanitarian norms, the working paper originally assigned to Ms. Forero Ucros. The Sub-Commission emphasized assessing the utility, scope and structure of a study on the real and potential dangers to the effective enjoyment of human rights posed by the testing, production, storage, transfer, trafficking or use of weapons of mass destruction or with indiscriminate effect, or of a nature to cause superfluous injury or unnecessary suffering, including the use of weaponry containing depleted uranium, in the working paper to be submitted to the Sub-Commission at its fifty-fourth session.

Humanitarian law and human rights

4. The terms of the mandate pose the problem of identifying the relevant humanitarian law and norms relative to the weapons listed above and the human rights likely to be affected by such deployment. Issues of humanitarian law do converge with issues of human rights since there is a minimum standard of ethics common to both fields. The notable difference is that the main United Nations Covenants and regional human rights instruments have no "threshold" and apply to all situations irrespective of whether there is armed conflict or not. These matters will be considered in Part I of this paper.

The weapons

5. The specific types of weapons listed in Sub-Commission resolutions 1996/16 and 1997/36 are nuclear weapons, chemical weapons, fuel-air bombs, napalm, cluster bombs, biological weaponry and weaponry containing depleted uranium.

6. The mandate identifies four categories of weapons:

(a) Weapons of mass destruction (WMD);

(b) Weapons with indiscriminate effect (WIE);

(c) Weapons of a nature to cause superfluous injury (WSI);

(d) Weapons of a nature to cause unnecessary suffering (WUS).

7. The four categories of weapons do not fall within self-contained or hermetically sealed categories of weapons. There is often overlapping and one weapon may have all four characteristics. Although etymologically a distinction can be made between WSI and WUS in practical terms, both terms refer to the same weapons and can be considered together.[2] The relevance of the classification, however, is self-evident since it pinpoints categories of weapons that when used as attack weapons are banned by humanitarian law, and that also infringe basic human rights.

8. Weapons containing depleted uranium are but a specific type of weapon which has been included within the compass of this working paper because of the novelty of these weapons and also because the effects of their use are such that they would equally infringe both humanitarian law and basic human rights. If weapons containing depleted uranium may not fit within the WMD class, there are indications that they fit within classes 2, 3 and 4, i.e. WIE, WSI and WUS.

9. The need to identify specific weapons which fit within the enumerated categories of weapons must be considered from the perspectives that they either do not conform with human rights and humanitarian law outright or they may not be compliant where their use is not curtailed within specific and clearly defined parameters which this working paper will try to delineate. All these matters will be considered in Part II of this paper.

I. HUMANITARIAN LAW AND THE HUMAN RIGHTS IN QUESTION

A. Human rights

10. Human rights are rights to be enjoyed by everyone at all times. However, in situations of armed conflict, some are likely to be infringed more often and in a particularly pronounced degree, especially in terms of rights that may be partially curtailed during armed conflict. Those rights are found in a number of international and regional documents including the International Covenant on Civil and Political Rights (ICCPR), the Genocide Convention[3] and the Convention against Torture.[4] Article 4 of the ICCPR, of course, grants States the right to derogate certain rights in times of war but prohibits any derogation of other rights.

1. The ICCPR, the Universal Declaration of Human Rights and the Charter of the United Nations

(a) The ICCPR

11. The main non-derogable human rights under the ICCPR that immediately come to mind as likely to be infringed by use of these types and categories of weapons in armed conflict are:

(a) The right to life (art. 6). The scope of the "right to life" was considered by the ICJ in its Advisory Opinion, "Legality of the threat or use of nuclear weapons".[5] Invoking article 6 of the ICCPR, the ICJ held that "in principle, the right not arbitrarily to be deprived of one's life applies also in hostilities";[6]

(b) Freedom from torture or cruel, inhuman or degrading treatment or punishment (art. 7).

The enjoyment of those rights are also protected in the main regional instruments, such as the European Convention for the Protection of Human Rights and Fundamental Freedoms, the American Convention on Human Rights and the African Charter on Human and Peoples Rights. The infringement of those two basic rights and freedoms can also be linked with the potential infringement of other human rights, namely:

(c) Freedom from slavery (art. 8);

(d) The rights to liberty and security of the person and the freedom from arbitrary arrest or detention (art. 9);

(e) The right of persons lawfully deprived of their liberty to be treated with humanity and respect consistent with human dignity (art. 10); freedom of thought, conscience and religion, including freedom from coercion which would implant one's freedom to have or to adopt a religion or belief of one's choice (art. 18).

(b) The Universal Declaration of Human Rights

12. The "right to life" is also prescribed in article 3 of the Universal Declaration[7] which states: "everyone has the right to life, liberty and security of person". The fundamental provisions of the Universal Declaration and of the ICCPR have been vindicated generally by the comity of nations to constitute customary international law.

13. Article 25 (1) of the Universal Declaration sets out the right of everyone to a standard of living adequate for health and well-being. In effect it recognizes the right to health and well-being.[8] Even before the Universal Declaration, the Constitution of the World Health Organization (1946) recognized the enjoyment of the highest attainable standard of health as one of the fundamental rights of every human being. The present status of State duties with regard to health is that State duties have now passed beyond the field of good intentions into the realm of binding international law. There is no doubt that State obligations in regard to health will be violated by the use of most of the weapons within the purview of this paper.

(c) The Charter of the United Nations

14. Article 2 of the Charter sets down the principle of sovereign equality of all States. In its paragraph 3, States are enjoined to settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered. Most important are the provisions of paragraph 4 which spell out that States shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State, or in any other manner inconsistent with the purposes of the United Nations. It is obvious that a State in possession of the weapons under review here would have substantial "threat power" over a State that did not, and that the threat of use could provoke significant curtailment of the rights and duties of States.

2. The Genocide Convention

15. Article II of the Genocide Convention defines genocide as meaning any of a number of acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, including:

(a) Killing members of the group;

(b) Causing serious bodily or mental harm to members of the group;

(c) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or part;

(d) Imposing measures intended to prevent births within the group.

16. Armed conflicts often carry political, ethnic, racial or religious undertones. History has shown that birth, colour, and religion have at times been considered an element of discomfort, discontent and division and led to war and genocide. Deliberate use of weaponry of the type and category under review when used in certain situations of armed conflict could be characterized as genocide.

3. The Convention against Torture

17. The Convention against Torture is to be read with article 5 of the Universal Declaration of Human Rights, article 7 of the ICCPR and the Declaration on the Protection against Torture.[9] Significantly, article 1 of the Convention against Torture describes the term "torture" as "any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a person for such purposes as ... punishing him for an act he or a third person has committed or is suspected of having committed ..." and article 2 provides that "no exceptional circumstances whatsoever, *whether a State of war or a threat of war* ... may be invoked as a justification of torture" (emphasis added). Similar provisions exist in regional documents such as the Inter-American Convention on Torture.[10] The use or threat of use of certain of these weapons could be viewed as intimidating or coercing both the combatants of the opposing forces but also the civilian population.

4. Concluding comments

18. It will be submitted that the effects of the weapons under study infringe some if not all the human rights elicited above, at least insofar as the use of those weapons affect civilians.

B. Humanitarian law

19. Humanitarian law or the law of armed conflict can be viewed from different perspectives. The law of armed conflict consists of treaties which are binding on the signatories akin to parties to a normal contract and also that part of "customary international law", an expression of the "law of civilized nations", relating to armed conflict.

20. Customary law as a whole arises where there is a uniform, consistent and general repetition of similar acts by competent State authorities (usage) and a recognition by States that such practice is binding upon them as law. The existence of customary law is dependent upon general agreement, not unanimous agreement. Thus, a State may be bound by a treaty that expresses customary international law, although it is not a party to that treaty. Customary humanitarian law consists of all aspects of armed conflict not specifically addressed in the treaties governing armed conflict. It is binding on all States, whether or not States have ratified specific treaties. All the major treaties governing humanitarian law, including the Hague Conventions of 1899 and 1907, the Geneva Conventions of 1949 and the two Additional Protocols of 1977, themselves incorporate customary international law in a number of ways, as will be set out below.

21. Reference to customary international law (as a source of law) is also contained both in the Charter of the United Nations as well as in the Statute of the International Court of Justice. The Charter of the United Nations begins with "We the peoples of the United Nations determined ... to establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained ..." and article 38 of the Statute of the International Court of Justice states:

> "the Court, whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply:
>
> "(a) international conventions ...;
>
> "(b) international customs, as evidence of a general practice accepted as law;
>
> "(c) the general principles of law recognized by civilized nations;
>
> "(d) judicial decisions and the teachings of the most highly qualified publicists ... as a subsidiary means for the determination of rules of law."

1. The Hague Conventions of 1899 and 1907

(a) Mindset of the Conventions

22. Reference to customary international law is found in the 1899 Hague Convention on the Laws and Customs of War on Land (Hague IV) and the 1907 Hague Convention. Paragraph 3 of the preamble defines one of the objects of the Convention as "to revise the general laws and customs of war, either with a view to defining them with greater precision or to confining them within such limits as would mitigate their severity as far as possible". It was felt necessary in the preamble to state that it has not been possible in the Convention to cover all the circumstances which can arise in practice.

(b) The Martens Clause

23. Of particular importance, the High Contracting Parties have proclaimed that they do not intend that unforeseen cases should, in the absence of a written undertaking, be left to the arbitrary judgement of military commanders. Instead, they have deemed it expedient to declare that "in cases not included in the Regulations adopted by them, the inhabitants and the belligerents remain under the protection and the rule of the principles of the law of nations, as they result from the usages established among civilized persons, from the laws of humanity, and the dictates of the public conscience".[11] The above clause, which is commonly known as the Martens Clause, therefore represents a link between treaty law and customary international law dealing with the law of armed conflict and it recognizes "customary international law" as the ultimate yardstick when measuring legitimacy of the means and measures used in armed conflicts.

(c) Proportionality

24. It is of interest that in section II of the Regulations, entitled "Hostilities", there is an important article 22 that proclaims: "The right of belligerents to adopt means of injuring the enemy is not unlimited." Article 22 in fact underlines a "proportionality" test so that the use of weapons must not be out of proportion with the pursuit of legitimate military action.

(d) Weapons causing unnecessary suffering and superfluous injury

25. Article 23 states that, in addition to the prohibitions provided by special conventions, it is especially forbidden to do certain things which include "to employ poison or poisoned weapons" and "to employ arms, projectiles, or material calculated to cause unnecessary suffering". It will be noted that the earlier Convention (1899) employed instead the formula "or material of a nature to cause superfluous injury" so that the two terms "calculated to cause unnecessary suffering" and "of a nature to cause superfluous injury" could be employed, mutatis mutandis, as covering the same situations.

2. The four Geneva Conventions of 1949

26. The four Geneva Conventions of 1949[12] and the two Additional Protocols to the Conventions which were adopted in 1977[13] are the major international instruments protecting victims of armed conflict. A key element in the 1949 Conventions is the enumeration of protections for the civilian population. The whole of Geneva Conventions I-IV, providing for minimum protections for both combatants and civilians, include a number of provisions that can clearly be applied to threat or use of weapons.

(a) Article 3

27. Common article 3 of the Geneva Conventions provides basic protections for combatants and civilians in armed conflict.[14] It provides that:

> "In the case of armed conflict ... occurring in the territory of one of the High Contracting Parties, each Party to the conflict shall be bound to apply, as a minimum, the following provisions:
>
> > '1. Persons taking no active part in the hostilities, including members of armed forces who have laid down their arms and those placed hors de combat by sickness, wounds, detention, or any other cause, shall in all circumstances be treated humanely, without any adverse distinction founded on race, colour, religion or faith, sex, birth or wealth, or any other similar criteria.
> >
> > To this end, the following acts are and shall remain prohibited at any time and in any place whatsoever with respect to the above-mentioned persons:
> >
> > '(a) Violence to life and person, in particular murder of all kinds, mutilation, cruel treatment and torture;
> >
> > '(b) Taking of hostages;
> >
> > '(c) Outrages upon personal dignity, in particular humiliating and degrading treatment;
> >
> > '(d) The passing of sentences and the carrying out of executions without previous judgment pronounced by a regularly constituted court, affording all the judicial guarantees which are recognized as indispensable by civilized peoples.'"

(b) Civilians to be spared and weapons not to be of indiscriminate effect

28. Common article 3 therefore establishes the principle that a distinction must be made between civilians and persons who have laid down their arms on the one side and combatants on the other side. The former must be treated humanely and cannot be subjected to violence. Weapons deployed against combatants and military targets should not therefore be of

indiscriminate effect so as to affect civilians or combatants hors de combat. As individuals they enjoy fundamental rights that must be respected by hostile parties in armed conflict. This article has been determined by the ICJ to apply as a "common yardstick" in any armed conflict, whether or not a particular State is an active participant in an armed conflict.[15] This decision clearly affects issues relating to the sale and trafficking as well as actual military use in armed conflict of the types and categories of weapons under review here and reinforces the large role played by customary humanitarian law.

3. Additional Protocol I

(a) General

29. Protocol I relating to the Protection of Victims of International Armed Conflicts recalls in its preamble that "every State has the duty, in conformity with the Charter of the United Nations, to refrain in its international relations from the threat or use of force against the sovereignty, territorial integrity or political independence of any State, or in any other manner inconsistent with the purposes of the United Nations". The same formula is adopted in the Conventional Weapons Convention.[16] Where breaches occur and situations of armed conflict arise, Protocol I caters for a whole list of protections.

(b) Protection of civilians

30. In its general provisions at article 1 (2), Protocol I sets down a general principle that "civilians and combatants remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience".

31. The protection of the civilian population against the effect of hostilities is specifically covered by the "Basic Rule": "In order to ensure respect for and protection of the civilian population and civilian objects, the Parties to the conflict shall at all times distinguish between the civilian population and combatants and between civilian objects and military objectives and accordingly shall direct their operations only against military objectives."[17]

32. Article 52 (2) in fact prescribes that "attacks shall be limited strictly to military objectives" which are defined as being "limited to those objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization offers a definite military advantage". In case of doubt whether an object that is normally dedicated to civilian purposes, such as a place of worship, a house or a school is being used to make an effective contribution to military action, it shall be presumed not to be so used (art. 52 (3)).

33. There are a number of additional provisions that specifically protect the civilian population. A few notable ones are:

(a) Article 50 (3), which states that the presence within the civilian population of individuals who do not come within the definition of civilians does not deprive the population of its civilian character;

(b) Article 51 (1), which declares that the civilian population and individual civilians shall enjoy general protection against dangers arising from military operations;

(c) Article 51 (2), which enjoins that the civilian population as such, as well as individual civilians, shall not be the object of attack and that acts or threats of violence which have for prime purpose the spreading of terror among the civilian population are prohibited;

(d) Article 51 (4) and (5), which prohibit indiscriminate attacks against civilians or civilian objects as opposed to military targets;

(e) Article 54, which prohibits starvation of civilians as a method of warfare.

It is accordingly prohibited to attack, destroy or render useless objects indispensable to the survival of the civilian populations which must be protected. Such objects would include foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works.

34. The need to protect civilians against the effect of hostilities emulates principles whereby weapons should not be directed against civilians and when used on military targets should not have an indiscriminate effect on civilians. The above-cited articles of Protocol I specifically establish those principles which are underpinned by common article 3 and the Fourth Geneva Convention.[18]

(c) New weapons

35. The conditions which must exist before "new weapons" can be used are also confirmed in Protocol I. A party to the Protocol is under an obligation to determine, "in the study, development, acquisition or adoption of a new weapon, means or method of warfare", whether its employment would, "in some or all circumstances be prohibited by this Protocol or by any other rule of international law applicable to the High Contracting Party". This is one of the few provisions of humanitarian law that imposes obligations on States at all times, not only when there is an armed conflict. The obligation of prior study of weapons to ensure that their use will not violate the laws and customs of war or any other international law was also stressed by the International Court of Justice in its Advisory Opinion on the legality of the threat or use of nuclear weapons.[19]

(d) Protection of the environment

36. The protection of the natural environment during warfare is covered by article 35 (3) and article 55 of Protocol I. Care must be taken to protect the environment against widespread, long-term and severe damage. The use of methods or means of warfare that are intended or may be expected to cause such damage to the environment and thereby prejudice the health or survival of the population is prohibited under the Protocol. At paragraph 31 of its Advisory Opinion, the ICJ finds that article 35 (3) of Protocol I also prohibits attacks against the natural environment by way of reprisals. The gist of the two above-mentioned articles is restated in article 1 of the Environmental Modification Convention of 1977:[20] "each State party to this

Convention undertakes not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State party."

37. On 25 November 1992 the General Assembly, in its resolution 47/37,[21] affirmed the general view that environmental considerations must be taken into account in armed conflict in the following terms: "destruction of the environment, not justified by military necessity and carried out wantonly, is clearly contrary to existing international law".

4. The Conventional Weapons Convention 1980[22]

38. The Conventional Weapons Convention, along with its four Protocols,[23] have been adhered to by a number of countries - 88 for the Convention and 61 for Protocol IV. The preamble to the Convention recalls a number of principles to which we have already adverted:

(a) Paragraph 3 - "the general principle of the protection of civilian population against the effects of hostilities";

(b) Paragraph 4 - "the principle that prohibits the employment in armed conflicts of weapons, projectiles and materials and methods of warfare of a nature to cause superfluous injury or unnecessary suffering";

(c) Paragraph 5 - "the principle prohibiting the employment of methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment";

(d) Paragraph 6 - "the principle that in cases not covered by this Convention and its annexed Protocols or by other international agreements, the civilian population and the combatants shall at all times remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of the public conscience".

Principles (a), (b) and (d) are also reproduced in the Anti-Personnel Mine Ban Convention.[24]

5. Concluding comments

39. The various international instruments cited above, which are by no means exhaustive, taken together with the precepts of customary international law show that a number of legal principles banning or limiting certain arms use are now firmly established.

40. Weapons are to be considered banned if:

(a) Their use has indiscriminate effects (no effective distinction between civilians and belligerents);

(b) Their use is out of proportion with the pursuit of legitimate military objectives;

(c) Their use adversely affects the environment in a widespread, long-term and severe manner;

(d) Their use causes superfluous injury and unnecessary suffering.

II. THE WEAPONS

A. Weapons of mass destruction

1. Nuclear weapons

41. Nuclear weapons (NWs) are explosive devices whose energy results from the fusion or fission of the atom. The process releases huge amounts of heat and energy and also powerful and prolonged radiation causing superfluous injury and unnecessary suffering to victims. The destructive powers of NWs cannot be contained in either space or time and are indiscriminate. The effects of NWs are catastrophic and have the potentiality of annihilating the whole mankind and the entire ecosystem of the planet. NWs therefore infringe humanitarian and human rights law outlined in Part I of this paper.

(a) The General Assembly of the United Nations and nuclear weapons

42. The General Assembly of the United Nations has on numerous occasions condemned the use of nuclear weapons as illegal, a violation of the Charter and a crime against humanity.[25] A few States, obviously NW States, maintain the contrary - on the theory that as NWs are not specifically prohibited by any international treaty they are not illegal. The author finds that theory to be flimsy and likens it to the scenario whereby an illiterate person would insist that writing does not exist.

43. On 15 December 1994 the General Assembly decided to seek an Advisory Opinion from the ICJ on the legality of the threat or use of nuclear weapons. It also referred to resolution 46/40 of 14 May 1993 of the World Health Assembly, in which the ICJ was requested to give an Advisory Opinion on whether the use of nuclear weapons by a State in war or other armed conflict would be a breach of its obligations under international law, including the constitution of WHO. In the resolution, WHO recognized that no health service in the world could alleviate in any significant way a situation resulting from the use of even one single nuclear weapon and that the use of nuclear weapons would have long-term environmental consequences affecting human health for generations, thereby impacting on development. WHO concluded that prevention was the only appropriate means to deal with the health and environmental effects of the use of nuclear weapons.

44. In its reference to the ICJ the General Assembly expressed its conviction that the complete elimination of nuclear weapons was the only guarantee against the threat of nuclear war.

(b) The Advisory Opinion of the ICJ on the use and threat of NWs

45. In its Advisory Opinion the ICJ noted that NW States had generally accepted that their "independence to act" was curtailed by the principles and rules of international law, more particularly humanitarian law. There is further no doubt that humanitarian law applies not only to conventional weapons but also to NWs although NWs were invented after most of the principles and rules of humanitarian law applicable in armed conflict had been elaborated. The Court cited with approval a passage in the written statement submitted by the Government of New Zealand:

> "In general, international humanitarian law bears on the threat or use of nuclear weapons as it does on other weapons. International humanitarian law has evolved to meet contemporary circumstances, and is not limited in its application to weaponry of an earlier time. The fundamental principles of this law endure: to mitigate and circumscribe the cruelty of war for humanitarian reasons."

46. The Court observed that the right to life guaranteed by article 6 of the ICCPR did not cease in times of war, that the use of NWs against a group as such may infringe article III of the Genocide Convention where the element of intent was manifest.

47. The Court also recognized that the use of NWs could be catastrophic for the environment, which "represents the living space, the quality of life and the very health of human beings, including generations unborn".

48. The Court considered, however, that "it does not have sufficient elements to enable it to conclude with certainty that the use of NWs would necessarily be at variance with the principles and rules of law applicable in armed conflict in any circumstance".[26] Whilst the ICJ could hardly have claimed that it was able to encompass all the factual uncertainties of a purely hypothetical problem, it went on to observe:

> "in view of the present state of international law viewed as a whole ... and of the elements of fact at its disposal, the Court is led to observe that it cannot reach a definitive conclusion on the legality or illegality of the use of nuclear weapons by a State in an extreme circumstance of self-defence in which its very survival would be at stake."[27]

49. The author is of the view that more has remained unsaid than has been said in the paragraphs of the Advisory Opinion referred to above. The ICJ did not want to commit itself to any firm pronouncement based on a simple hypothesis which was expressed in general terms. It never said that the use of NWs for self-defence purposes, albeit in an extreme case, could be justified. It merely left the question open.

50. Emphasis must however be placed on paragraph 2 (c) of the *dispositif*[28] of the Advisory Opinion which contains the essence of the opinion: the Court unanimously ruled that "a threat or use of force by means of nuclear weapons that is contrary to Article *2*, paragraph 4, of the United Nations Charter and that fails to meet all the requirements of Article 51, is unlawful".

(c) Nuclear winter

51. During the period 1983-1989 extensive investigations were carried out on nuclear winter. Although the nuclear arsenals of the two major nuclear powers are reported to have been significantly reduced in both number and capacity, yet scientific studies still leave no doubt that any nuclear war will likely result in a nuclear winter. Only a few hundred nuclear detonations, or less if selectively targeted (i.e. on petroleum facilities or built-up areas) seem to be sufficient to bring about at least a "nominal" nuclear winter. A "nominal" class III nuclear winter would carry in its wake significant cooling and darkening, drought, massive quantities of generated pyrotoxins, widespread radioactive fallout and other atmospheric perturbations. Average land temperature would drop about 10° C. At noon, the sun would have about one third its usual brightness. Months later, sunlight would return to more than its usual intensity, enhanced in the ultraviolet range by depletion of the high-altitude ozone layer.[29]

52. Under the latest arms reduction agreement,[30] the leaders of the two major NW States pledged to reduce their present declared 6,000 nuclear warheads on launch-ready status by two thirds over the next decade. Only a fraction of what remains would suffice to cause global havoc.

53. A study made by WHO and chaired by a former Nobel laureate[31] found that a nuclear war between the two major nuclear-weapon countries could kill 1 billion people outright. It could also produce a nuclear winter that would probably kill an additional 1 billion people.

54. A study by Professor Alan Robock reached the same findings. His views are that: "Everything from purely mathematical models to forest fire studies shows that even a small nuclear war would devastate the earth."[32]

55. Of more immediate significance, in view of the volatile relations existing between India and Pakistan at time of writing, scientists predict that a limited nuclear war by them would kill at least 3 million people.[33] More chilling calculations are revealed on the basis of only a tenth of the NWs of the two countries being exploded above 10 of their largest cities.

(d) Transfer of nuclear material

56. The need to control the availability and movement of nuclear material is self-evident. Nuclear material also includes nuclear waste which is costly to dispose of. The temptation to disperse such waste on economic grounds into the backyard of developing countries under misleading and false descriptions is a real threat that has been addressed by treaty.[34]

57. The declared objectives of the Convention are to facilitate the safe transfer of nuclear material and to establish effective measures for its physical protection.

58. The parties to the Convention undertake:

(a) That they will ensure that, within their territories, nuclear material is duly protected during international nuclear transport (art. 3);

(b) That they will not export nuclear material unless they have received assurances that such material will be protected during international transport (art. 4, para. 1);

(c) That they will not import nuclear material from a State not a party to the Convention unless they have received assurances that such material will be protected during international transport (art. 4, para. 2);

(d) That they will not allow the transit of nuclear material between States not parties to the Convention through their territories unless they have received assurances that the nuclear material will be protected (art. 4, para. 3).

59. The States parties also undertake to pass appropriate municipal legislation to penalize illicit dealings with nuclear material including theft and fraudulent obtaining of nuclear material or threat to use such material (art. 7). In case of theft or any unlawful taking of nuclear material States parties undertake to provide cooperation and assistance to recover and protect such material to any State that so requests (art. 5, para. 2).

60. The International Atomic Energy (IAEA) is constituted as the central authority and point of contact having responsibility for the physical protection of nuclear material at the international level (art. 5, para. 1).

(e) Stand of NWs States on a nuclear ban

61. Considering the peculiarities of NWs and the devastating effects that will result from any such deployment, the author has tried to understand the reason behind the striking non-existence of a full-fledged NW ban treaty. A marked degree of double standards, one for the international forums and one for the military drawing board, has been observed from the major NW States with regard to the issue. This is amply made out when examining some treaties.

(i) The Non-Proliferation Treaty and the resolution on security assurances

62. In 1970 the Treaty on the Non-Proliferation of Nuclear Weapons[35] (NPT) came into force after it was initiated by the United Kingdom, the then USSR and the United States in July 1968. The treaty focuses on a number of concerns relating to the development of nuclear weapons, namely:

(a) The devastation likely to be caused to mankind by a nuclear war and the need to avert the danger of such a war and to take measures to safeguard the security of peoples;

(b) The proliferation of nuclear arms would seriously enhance the danger of nuclear war;

(c) The intention to achieve the early cessation of the nuclear arms race and to undertake effective measures for nuclear disarmament.

63. Signatories also expressed their desire to ease international tension and to strengthen trust between States in order to facilitate the cessation of the manufacture of NWs, the liquidation of all existing stockpiles, and the elimination of NWs from the national arsenals. In fact, in order to make those pious wishes workable two basic and interrelated understandings and agreements were grafted upon them, namely:

(a) NW States would cease manufacturing and would also eliminate present and future stockpiling of NWs;

(b) Non-NW States would undertake not to manufacture or seek to manufacture NWs and in exchange would receive an undertaking from the NW States that NWs would not be used against them.[36]

64. Those understandings can be reckoned as the most practical and realistic in the circumstances considering that no one can now uninvent NWs. Confidence-building is here essential since NWs will remain in practice in the hands of an elite few who have the technology to produce them at will. In spite of their promises not to manufacture and stockpile NWs at a given time, NW States may have the human fickleness and technology to change their mind. The revelation of the Nuclear Posture Review which was leaked in March 2002 has the potential of sending the NPT to the shredding machine. If actions follow words, the NPT will only have served as a guarantee of hegemony and a self-serving package devised by some to keep others at boot.

(ii) The Nuclear Test-Ban Treaty

65. The same scenario can be observed when the Nuclear Test-Ban Treaty[37] was initiated by the United States, the then USSR and the United Kingdom in 1963. The "Original Parties" proclaimed in the preamble that their principal aim was the speediest possible achievement of an agreement on general and *complete disarmament under strict international control in accordance with the objectives of the United Nations* which would put an end to the armaments race and eliminate the incentive to the production and testing of all kinds of weapons, including NWs (emphasis added). The original parties claimed that the discontinuance of all test explosions of NWs for all time was being sought in a desire to put an end to the contamination of man's environment by radioactive substances so that each of the parties to the Treaty undertook "to prohibit, to prevent, and not to carry out any NW test explosion, or any other nuclear explosion at any place under its jurisdiction or control in the atmosphere or under water or in any other environment if such explosion causes radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted".

66. A first observation is that the Treaty does not hinder the continuation of underground nuclear tests. Indeed, at a meeting of the Disarmament Committee held the previous year, the Soviet delegate,[38] addressing himself to two draft treaties concerning the total and partial ban on tests of NWs which were advanced on 29 August 1962 by the delegation of Great Britain and the United States and which contain similar provisions, pointed out that the continuation of underground nuclear blasts would not lead to an end to the nuclear armaments race, and that the threat of thermonuclear war would only increase. He pointed out that the "legalization" of

underground tests would be a stimulus to States that wanted to develop their own NWs. He felt that the proposal was aimed at providing Western powers with one-sided military advantages, considering that the United States had been using underground tests to improve its NWs. Should underground nuclear tests be legalized with a simultaneous prohibition of such tests in the atmosphere, that would mean that the United States could continue improving its NWs whereas the Soviet Union would have "its hands bound". An offer was made to reach agreement on the ending of all NW tests no matter in what medium they were held with a memorandum, submitted by "eight neutralist States", serving as a basis of discussion.

67. The author of this paper can only observe that the sound and laudable observations of Mr. Kuznetsov were not taken heed of by the Soviet authorities one year later when the USSR signed the Treaty as one of the three "Original Parties".

68. In an editor's note which appeared in Hsinhua[39] in its edition of 29 July 1963 some of the underlying motives behind the Treaty were laid bare. In a public statement made on 26 July 1963 President John F. Kennedy pointed out that the Treaty:

(a) Would not "eliminate the danger of war", "nor [did] this treaty mean an end to the threat of nuclear war";

(b) Would not affect the United States strength of NWs of "entirely sufficient yield";

(c) Would permit, and did not prohibit, the United States from continuing its underground nuclear testing;

(d) Would not restrict continued production and stockpiling of NWs by the United States;

(e) Would not restrict the use of NWs by the United States in time of war;

(f) Would not restrict United States "assistance" to other nations.

69. In addition, Kennedy said that the United States would benefit from the treaty which could prevent the non-NW States from possessing NWs and that at any rate the United States stood "ready to withdraw (from the Treaty) and to resume all forms of testing, if [it] must".

70. The French newspaper *Le Monde* found the Treaty to be of little significance. It summarized its impact as follows: "It [the Treaty] does not make the signatories promise much since they keep without any control stocks of [nuclear] weapons sufficient for destroying the planet many times and they are able to increase their stocks at will."

71. But the most enlightened opinion came from the *Ghanaian Times*, which focused on the fact that "the ultimate objective of the peoples of the world is to secure a ban on all NWs, their manufacture, testing and stockpiling. It is only on such a condition that the threat of a nuclear conflagration can be completely removed and peace thus safeguarded."[40]

2. Mini-nukes and bunker busters

72. In December 1996 four complete retrofit kits of the B61-11 earth-penetrating nuclear bombs were delivered to the United States Air Force. This was stated by the Director of Sandia National Laboratories, C. Paul Robinson, before a subcommittee of the Senate Armed Services Committee.[41]

73. The B61-11 is reported to have a specially hardened nose of depleted uranium. The new case design allows soil penetration of some 25 feet upon which the nuclear bomb would detonate. The Pentagon now wants a bomb four times heavier than the actual 1,200-lb B61-11 for deeper penetration.

74. The B61-11 was introduced to replace the B53, an 8,900-lb, nine-megaton bomb that was developed as a "city buster". Since the deterrent value of older weapons designed to destroy entire cities is virtually nil because no one thinks they will be used, some believe that "rogue States" and "terrorist groups" will apprehend that the United States may more likely retaliate with smaller tactical NWs which, for comparative purposes, are still several times more powerful than the atomic bombs dropped on Japan in 1945.

75. A classified United States Nuclear Posture Review (NPR) leaked in March this year[42] indicates that the Pentagon had been ordered by the Government to draw up war plans for the first use of NWs against seven States, reputedly termed "axis of evil", namely Iraq, the Islamic Republic of Iran, the Democratic People's Republic of Korea, the Libyan Arab Jamahiriya, the Syrian Arab Republic, the Russian Federation and China. The first five countries are not nuclear armed.

76. Concerns have been expressed that the development of the B61-11 contravenes the Comprehensive Test-Ban Treaty since it is a new weapon developed after the treaty was signed, though not ratified, by the United States in September 1996.

77. It is said to be new because it gives the United States a new capability to destroy deeply buried targets like command and control bunkers. The position of the United States Government is that the B61-11 is only a modification of the existing B61-7 bomb utilizing an existing nuclear package that has not required a nuclear test.

78. Concerns have been expressed that the B61-11 may call into question the "security assurances" whereby the United States pledged not to use NWs against any non-NW State that is a party to the Nuclear Non-Proliferation Treaty (NPT).

79. The author has no doubt that the NPR instructions are contrary to humanitarian and human rights law because:

(a) Mini-nukes are still NWs that fall under WMD, WIE and WUS and that further cause permanent ill effects on the environment;

(b) The United States would be in breach of the "security assurances" given by it as an express condition for the renewal by non-NW States of the NPT.

80. The NPR is an indication that the United States is prepared to violate a world taboo, cross the threshold and break the firewall by adopting a policy of first-strike nuclear attack.

81. There cannot be a better illustration of a good scholar following the advice of a bad teacher than to quote the recent stand of H.E. Munir Akram, Pakistan's Ambassador to the United Nations, who is reported to have said that while Pakistan would not attack India unless it was first attacked, it had never subscribed to a doctrine of "no first use" of nuclear arms against its neighbour.[43]

3. Biological and chemical weapons

82. Biological and chemical weapons are considered as weapons of mass destruction (WMD) because of their destructive potential. They also cause unnecessary suffering and may affect the civilian population in an indiscriminate manner. Their prohibition and total destruction must therefore be a priority objective of the comity of nations. A naming of some of the more notorious chemical and biological agents that can be used as WMD will help situate the debate.

83. Some of the chemical agents are:

(a) Mustard gas, first used as a weapon in the First World War. It causes blisters and can be fatal if inhaled;

(b) Hydrogen cyanide, a blood agent used worldwide to manufacture acrylic polymers and which was reportedly employed during the Iran-Iraq war;

(c) Sarin, a nerve agent developed during the Second World War that causes respiratory failure. In 1995, *Aum Shinrikyo*, a Japanese cult, used it to kill 13 people in a Tokyo subway. The attack also caused some 5,500 non-fatal casualties;

(d) Soman, a nerve agent that made up much of the former Soviet Union's chemical arsenal;

(e) CS, the commonly used tear gas for riot control. It can be deadly if inhaled in high concentrations;

(f) Phosgene, a dangerous choking agent that accounted for 80 per cent of chemical deaths in the First World War.

84. Among biological agents the following are the more notorious:

(a) Anthrax - the much-talked-about white powder sent through United States mail following 11 September 2001. It can be particularly deadly if spread by aerosol. It causes respiratory failure and is lethal. Antibiotics (CIPRO, in particular) help if taken early;

(b) Ebola - a virus which decimated some African countries and which *Aum Shinrikyo* tried to obtain;

(c) Cholera - a bacterium which is stable in water and which can be used to contaminate reservoirs;

(d) Smallpox - a highly contagious virus that was eradicated in 1977. It officially exists, however, in two laboratories in the United States and Russia. Only limited amounts of vaccine exist.

85. The two major treaties banning the production, storage and use of chemical and biological weapons are the Chemical Weapons Convention 1993 (CWC)[44] and the Biological and Toxin Weapons Convention 1972 (BWC).[45] In the preamble to both conventions reference is made to the Poisonous Gas Protocol of 1925,[46] which is thus supplemented by the two conventions.

(a) The BWC

86. The BWC prohibits the development, production, stockpiling and acquisitions of biological (bacteriological) and toxin (organic poisons) weapons. These weapons are dangerous weapons of mass destruction, the use of which is "repugnant to the conscience of mankind" - as mentioned in the last paragraph of the preamble. Paragraph 1 of the Poisonous Gas Protocol also states that their prohibition is "universally accepted as a part of International Law, binding alike the conscience and the Practice of nations". Relatively small amounts of biological or chemical warfare agents are reported to be able to produce huge numbers of casualties - according to some estimates, casualties could run into hundreds of thousands.[47] The main weakness of the BWC is the lack of an independent mechanism for verifying compliance. The difficulty in distinguishing biological agents used for legitimate, e.g. medical and pharmaceutical, purposes and those used for purposes of biological warfare can be real. The strain of a bacterium needed to make a biological weapon may be the same as for cultivating a vaccine. In March 2000, however, at a symposium marking the twenty-fifth anniversary of the BWC, the Chairman of the Ad Hoc Group of States Parties to that Convention stated that a verification protocol to the Convention was being negotiated.

(b) The CWC

87. The CWC is a global treaty that bans an entire category of weapons of mass destruction. Negotiations took some 20 years to reach fruition at the Conference on Disarmament. The Convention's scope, the obligations assumed by the States and, more especially, the monitoring system for compliance have brought new ideas and a ray of hope. The CWC is an arms control treaty which impacts directly on companies engaged in the commerce of dual-use chemicals that can be turned into chemical weapons. Those companies are required to submit reports to their respective Government and are subject to inspection by the Organization for the Prohibition of Chemical Weapons, the international body that administers the treaty in The Hague.

88. As of 1 January 2001, 141 States had ratified or acceded to the Convention and a further 35 States had signed it. Eighteen members of the United Nations have neither signed nor ratified the CWC including Iraq, the Democratic People's Republic of Korea, the Libyan Arab Jamahiriya, Egypt, Angola and Somalia.

4. Biological and chemical versus nuclear weapons

89. Far from making an apology for the illegality and criminality of the use of biological and chemical weapons which are banned for all purposes by customary international law and by treaties which are largely adhered to by the vast majority of nations, the author cannot help reflecting on the glaring fact that no agreement, on a global and comparable scale, to ban completely the production, stockpiling and use of nuclear weapons exists.

90. Legitimate questions can be asked as to why less success has been achieved in securing a treaty banning NWs although the ill effects of NWs are far more consequential and obnoxious than those of biological chemical weapons.

91. The latter are sometimes referred to, with some degree of derision, as the poor men's NWs. That derogatory term underscores two facts:

(a) Biological and chemical weapons are weapons of mass destruction; and

(b) The production, transfer, stockpiling and use of certain biological and chemical weapons do not require the high technology which remains the exclusive domain of rich, industrialized and dominant countries.

92. There are reports that *Aum Shinrikyo* had set up its own complex of chemical factories and biological laboratories. The sarin was thus home brewed.

93. One may wonder if it is not because these weapons can be produced in poor countries, but also because they can be smuggled and used elsewhere that it has become imperative for the world at large to curtail their use through treaties to which certain nations may otherwise have been reticent to adhere.

94. On the other hand, since NW States belong to a small, select club where the membership is constrained by the members themselves, there may not appear to be any pressing need to adhere to any corresponding treaty banning NWs. One may wonder whether bilateral agreements reached and usually announced with great pomp to limit the proliferation of such weapons, as opposed to banning them, are not in the nature of periodic public relations exercises rather than dictated by higher moral considerations to genuinely decrease the real risks of nuclear war.

B. Weapons with indiscriminate effect

95. WIE are weapons the effects of whose use cannot be limited to military objectives but strike civilians and civilian objects as well without distinction.

96. Article 51 (4) of Protocol I which prohibits indiscriminate attacks defines such attacks as follows:

(a) Those which are not directed at a specific military objective;

(b) Those which employ a method or means of combat which cannot be directed at a specific military objective; or

(c) Those which employ a method or means of combat the effects of which cannot be limited as required by the Protocol and consequently, in each such case, are of a nature to strike military objectives and civilians or civilian objects without distinction.[48]

97. Furthermore, article 51 (5) particularizes the following types of attacks, among others, as indiscriminate:

(a) An attack or bombardment by any methods or means which treat as a single military objective a number of clearly separated and distinct military objectives located in any area containing a similar concentration of civilian or civilian objects;

(b) An attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.[49]

98. The prohibition against indiscriminate attack carries a necessary corollary, in that the presence or movements of the civilian population or individual civilians shall not be used to render certain areas immune from military operations, in particular in attempts to create human shields to protect military objectives from attacks.[50]

99. It is clear that the use of the word "indiscriminate", both in article 51 (4) (c) of Protocol I with regard to the term "indiscriminate attacks" and in the terms of reference of this working paper with reference to the term "weapons with indiscriminate effect", apply, mutatis mutandis. This working paper therefore is concerned with weapons, the effect of which cannot be limited to military objectives and whose use could be in breach of humanitarian law.

100. The following weapons will be studied in turn as an illustration of what some of the WIE are, namely anti-personnel mines, cluster bombs (CBs) and fuel air explosives. They are, however, by no means limitative. As we have already seen, weapons of mass destruction are by definition equally indiscriminate in effects.

1. Anti-personnel mines

101. The preamble to the Anti-Personnel Mines Convention (APMC)[51] reminds us that anti-personnel mines (APMs) are treacherous weapons which "kill or maim hundreds of people every week; mostly innocent and defenceless civilians and especially children". APMs, therefore, "obstruct economic development and reconstruction, inhibit the repatriation of refugees and internally displaced persons, and have other severe consequences for years after emplacement".

102. An anti-personnel mine is defined as "a mine designed to be exploded by the presence, proximity or contact of a person and that will incapacitate, injure or kill one or more persons". But the use of an anti-personnel mine that is detonated manually from a remote or protected

position using, for example, a land line or electronic signal is not prohibited. It is the indiscriminate effect of anti-personnel landmines which automatically explode by the presence, proximity or contact of a person that primarily renders them illegal.

103. The APMC imposes broad restrictions on the States parties:

(a) They cannot use APMs (art. 1 (1));

(b) They cannot develop, produce, acquire, stockpile, retain or transfer APMs;

(c) They cannot assist, encourage or induce activities prohibited under the Convention.

104. The APMC has set ambitious goals for member States which are required to destroy their stockpiles within 4 years (art. 4) and clear any existing mined areas under their jurisdiction or control within 10 years from the time the Convention enters into force for them (art. 5). To ensure compliance, States parties are required to take national implementation measures, including imposition of penal sanctions to prevent and suppress any activity prohibited by the Convention which may be carried out within their jurisdiction. They are also to report on their stockpile of APMs and undertake decommissioning programmes.

105. There are presently 122 States parties to the Convention with 11 more who have signed. Whilst APM transfers appear to have virtually stopped and mine-related accidents are declining, it must be noted that many militarily significant countries such as the United States, Russia, China, India and Pakistan still remain outside the Convention.

106. The rationale of certain Governments in refusing to sign the APMC is that they may need to use the weapons one day. It is said that even Hollywood seems to have lately sent the message to ban APMs. "In an era of ever more precise smart-bomb technology, landmines are the ultimate in imbecilic weaponry. They are the psycho-killers of modern arms: cross their path and they blow you away - for absolutely no reason whatsoever."[52]

2. Cluster bombs

(a) Definition and use of cluster bombs

107. Cluster bombs (CBs) are munition containers which open in mid-air and disperse smaller munitions or submunitions. They are usually dropped from aircraft or delivered by surface artillery or rockets.[53] The large number of munitions dispersed increases the density of explosives in the target area, with submunitions designed to strike every few feet or so. CBs saturate an area with explosives and tiny flying shards of steel. Depending on the type of delivery the submunitions can be dispersed to areas as large as several football fields.

108. CBs are usually designed to explode on impact, just before impact or a short time after impact. CBs and landmines are therefore different in design and intended function and only landmines are intended to rest in the soil until they explode when disturbed. CBs, however, have

a failure rate that is reported to be between 5 and 30 per cent. Any use of CBs therefore will in effect result in creating unregulated minefields since "failure" does not mean that the weapons are harmless. They may explode with the slightest touch, when picked up by children or when inadvertently stepped upon by an unsuspecting passer-by.

109. According to the United States Office of Munitions, some 30 million submunitions were dropped over Iraq and Kuwait during the Gulf war.[54] Assuming a low failure rate of 5 per cent, that would still leave 1.5 million pieces of unexploded ordnance (UXOs) in that region.

110. In 1991 Iraq reported that as at August of that year, 440 injuries and 168 deaths had befallen Iraqi civilians because of UXOs dropped by the United States. UXOs were responsible for the death of nearly 10 per cent of the United States fatalities in the Gulf war. Although there were claims that CBs were self-deactivating, hundreds of Iraqi civilians have been killed or injured by those devices which never got round to self-deactivating. The percentage of CB failures in the Gulf was reported to be as high as 20 per cent.

111. CBs were reportedly used in the Lao People's Democratic Republic from 1964 to 1973 by the United States. Even today in Xieng Khouang, believed to be infested with anti-personnel UXOs, farmers and civilians who were not yet born when the war ended are being maimed and killed in their rice fields from defective bombs dropped more than 20 years before.[55]

112. In Afghanistan, during the Soviet occupation the Soviet army is reported to have used CBs against civilians in 1995.[56] Last year and early this year the United States dropped CBs in Afghanistan in its fight against the Taliban. The anti-personnel submunitions meant to explode shortly after they were dropped had bright yellow casings of the same colour as the food packets which the United States had airdropped some time before.

113. CBs are reported to have been also used in Angola, Azerbaijan, the countries of the former Yugoslavia, Chechnya, Colombia, Ethiopia, Georgia, Lebanon, Nicaragua, Sierra Leone and Turkey.[57]

(b) Types of CBs

(i) CBU-87

114. One of the latest CBs in the United States arsenal is the CBU-87 combined effects munition. Combining light anti-armour with anti-personnel capabilities together with incendiary effects, it was the first weapon to include all three "kill mechanisms".

(ii) The *Belouga* and others

115. Cluster munitions have also been built by several nations: France has its *Giboulée*, *Belouga* and Thomson-Brandt BAP-200. The second name is no caviar, and the last named is a cratering bomb. The United Kingdom built and dropped one of its CBs, the BL-755, on Argentine troops in the Falklands. More recently, the JP-233's cluster weapons were extensively used by RAF Tornado aircraft in the Gulf war. Germany too has built its own CB, the

MBB-Diehl MW-1, a "multipurpose" weapon. Russia has developed the RBK-500, a CB in the 500-kilogramme class. Israel has developed at least one type of CB, designated the TAL-2. Chile and South Africa are also known to have produced CBs and it is likely that such weapons are made by other countries not listed in this paper.

(c) The illegality of CBs

116. The Anti-Personnel Mines Convention 1997 describes "anti-personnel mine" as meaning "a mine designed to be exploded by the presence, proximity or contact of a person and that will incapacitate, injure or kill one or more persons". That definition would include an unexploded cluster munition that would turn into a landmine. This has been part of the concern of the United States in not joining the APMC. The preamble to that Convention at paragraph 4 recognizes that "a *total ban* of anti-personnel mines would also be an important confidence-building measure" (emphasis added).

117. It cannot be gainsaid that munition manufacturers and military decision makers take into account the failure rate of munitions when computing the kill rates of cluster bombs in various situations. They also have foreknowledge that civilians are likely to be injured by UXOs. Considering the vast amount of munitions dispensed by CBs and the corresponding large number of UXOs which will result and will likely affect civilians, the author has no doubt that CBs are indiscriminate and accordingly contrary to humanitarian and human rights law. Weapons that lurk in the soil, often buried deeply underneath, waiting for the unborn to live so that they may be killed are indiscriminate in the extreme.

118. The International Committee of the Red Cross (ICRC) has asked for a moratorium on the use of cluster bombs.

3. Fuel-air explosives (FAEs) or daisy-cutters

(a) BLU-82, the 15,000-pound bomb

119. The *Washington Post* reported on 6 November 2001 that two BLU-82 bombs were dropped on Afghanistan. The BLU-82, a "fuel-air explosive" (FAE) 15,000-pound bomb, is reported to be the world's biggest non-nuclear device. Nicknamed "Big Blue" by the Associated Press, the BLU-82 is as large as a Volkswagen beetle, though heavier. FAEs are also known as hypobarometric bombs, or daisy-cutters.

120. The name "hypobarometric" refers to the fact that these bombs are activated above ground surface by means of a barometer or atmospheric pressure sensor that is activated upon deployment. The explosive is first dispersed in the atmosphere before being ignited by a detonator. According to Laura Flanders,[58] a journalist and broadcaster, the result is "a firestorm that incinerates an area the size of five football fields, consumes oxygen, and creates a shock wave and vacuum pressure that destroys the internal organs of anyone within range".

121. The name daisy-cutter comes from the shape of the crater left by the bomb.

122. In a briefing, a high-ranking officer of the United States military said: "As you would expect, they make a heck of a bang when they go off and the intent is to kill people."[59]

123. FAEs were first used in the Korean war. They were used in Viet Nam to create instant helicopter landing pads and in the Gulf war to detonate minefields and terrorize Iraqi troops. The first generation used gasoline, making them huge Molotov cocktails. The second generation, in current use, uses aluminium powder which burns at around 10,000 degrees Fahrenheit. A blast would cover an area a mile in diameter and generate pressure sufficient to crush underground tunnels, including reinforced arches, 12 feet deep. The third generation FAEs use uranium powder which burns even hotter.[60] Both second and third generation FAEs are easily mistaken for nuclear weapons since they produce the familiar mushroom cloud.

(b) The illegality of FAEs

124. The writer does not see how civilian casualties can be avoided when a weapon of the magnitude of the "Big Blue" is used. Its effect would, in all probabilities, be indiscriminate. One can also imagine the not unlikely scenario where one of those bombs could run amiss of its target. Further, there have lately been increased concerns that those weapons of tremendous destructive power may be the cause of earthquakes. The *Agence France Presse* (AFP) reported on 6 March 2002 that a severe earthquake which had struck northern Afghanistan on the previous day could have been caused by the massive use of powerful bombs by United States troops. An unnamed Russian source was said to have stated that some of the bombs were known to provoke landslides. The quake, which measured 7.2 on the Richter scale, was unprecedented in Afghanistan. It triggered landslides in Dahari Zoa in northern Afghanistan, burying houses and damming up the river which then flooded other houses. Weapons watchers have also made a correlation between the heavy bombing of bunkers in Serbia with the massive earthquake in neighbouring Turkey sometime after.

125. Whilst these weapons qualify as weapons with indiscriminate effect they may also be a menace to the environment.

C. Weapons of a nature to cause superfluous injury

126. As explained in Part I, the two terms "weapons causing superfluous injury" (WSI) and "weapons causing unnecessary suffering" (WUS) mean more or less the same thing and can be used, mutatis mutandis. "Superfluous" means "more than is needed, not needed, unnecessary".[61] The word "unnecessary" is easily understood. The two terms used in conjunction in fact make up the gist of the title of the Conventional Weapons Convention.[62] Recourse to some amount of violence to injure or to kill is bound to be necessary in an armed conflict. Soldiers, at least those in "Dad's army", used to have a rifle and perhaps a bayonet to fight with. However, not every type of ammunition is permitted. One that expands or flattens on impact (the so-called "dum-dum" bullet), which causes a gaping wound that is difficult to treat, is prohibited precisely on the ground that it causes superfluous injury and unnecessary suffering. Again, whilst the use of the bayonet is permitted, the bayonet should not bear notches which would cause a jagged wound resulting in suffering which is out of proportion and unnecessary.

127. It is not possible to enumerate with any degree of precision and completeness a list of weapons that would be prohibited on the ground that they fall under WUS or WSI. This is a factual issue and must be assessed case by case in an objective manner. Suffice it to say that all the types of weapons under consideration in this paper would equally fall under the classification of WUS and WSI.

D. Weapons containing depleted uranium

1. General

128. Weapons containing DU are of relatively recent use. Although experiments using DU in armour-piercing weapons began in the late 1950s in the United States and the USSR, DU weapons were reportedly used for the first time in combat in 1974 by the Israeli army under United States supervision during the Yom Kippur war.[63] The experiments resulted in mass production of DU munitions in the United States.

129. DU, a heavy metal almost twice as dense as lead, is a waste product of nuclear bomb production. The United States Department of Energy is reported to have a stockpile of some 500,000 metric tons accumulated ever since the earliest atomic projects of the 1940s. Civilian uses of DU include uses as ballast and counterweights in aircrafts, radiation shields in medical radiation therapy units and containers for the transport of radioactive materials.[64] DU is also used for protection of military vehicles like tanks and in ammunition designed to penetrate armour plate. In fact, almost the entire American arsenal of current armour-piercing bullets is made of DU.

2. Widescale military use of DU

130. DU ammunition was first used on a wide scale during the Gulf war in 1991. The Pentagon has officially confirmed that at least 320 metric tons of DU were left behind on the battlefields of Iraq, Kuwait and Saudi Arabia.[65] Russian military experts believe that 1,000 metric tons would be nearer the actual amount.[66] In a paper submitted to the United Nations Commission on Human Rights,[67] Dr. Beatrice Boctor, a well-known anti-DU activist,[68] reports that estimates based on information obtained through the Freedom of the Information Act suggest that United States, British and possibly Saudi Arabian forces fired 944,000 rounds, that is 2,686 tons, of DU-tipped bullets.[69] At least 350 metric tons of DU fragments still lie in the battlefields and more in the form of aerosols from the explosions. These will continue to pollute the ecosystem of the Gulf for generations. A British Atomic Energy Authority (AEA) report declares that some 500,000 will die before the end of the century from the radioactive debris left in the desert.[70]

131. DU shells were also used by the United States forces in the Balkans. This was confirmed in a United States Department of Defence news briefing on 3 May 2001. Information on the quantity of DU ammunition used by NATO in the 1999 "Operation Allied Force" against Yugoslavia was given by the NATO Secretary-General, Lord Robertson, to United Nations Secretary-General Kofi Annan. DU was used during approximately 100 missions and approximately 31,000 rounds of DU ammunition were used.[71] Comparatively, there were at least 100 times more DU munitions used in the Gulf than in the Balkans.

132. There is every likelihood that DU shells have also been used in Afghanistan. The first hint that they may have been used came in January this year. Reuters reported on 16 January that Donald Rumsfeld, the United States Defence Secretary, said that: "One site registered an increased level of radioactivity but it appeared to be a result of depleted uranium in some warheads and not from any nuclear or radiological weapon of mass destruction."[72] Review and assessment in this area are essential, as soon as possible and for obvious reasons.

3. Legal compliance of weapons containing DU as a new weapon

133. Annex II to the Convention on the Physical Protection of Nuclear Material 1980 (which became operative on 8 February 1997) classifies DU as a category II nuclear material. Storage and transport rules are set down for that category which indicates that DU is considered sufficiently "hot" and dangerous to warrant these protections. But since weapons containing DU are relatively new weapons no treaty exists yet to regulate, limit or prohibit its use. The legality or illegality of DU weapons must therefore be tested by recourse to the general rules governing the use of weapons under humanitarian and human rights law which have already been analysed in Part I of this paper, and more particularly at paragraph 35 which states that parties to Protocol I to the Geneva Conventions of 1949 have an obligation to ascertain that new weapons do not violate the laws and customs of war or any other international law. As mentioned, the ICJ considers this rule binding customary humanitarian law.

4. Properties of uranium and DU

134. WHO Fact Sheet No. 257 gives clear and simple data on the properties of Uranium and DU:

(a) Uranium:

(i) Uranium is a silver-white, lustrous, dense, natural, weakly radioactive element. It is ubiquitous throughout the natural environment, and is found in varying but small amounts in rocks, soils, water, air, plants, animals and in all human beings;

(ii) Natural uranium consists of a mixture of three radioactive isotopes which are identified by the mass numbers ^{238}U (99.27% by mass), ^{235}U (0.72%) and ^{234}U (0.0054%);

(iii) Uranium is used primarily in nuclear power plants. However, most reactors require uranium in which the ^{235}U content is enriched from 0.72% to about 3%;

(b) Depleted uranium:

(i) The uranium remaining after removal of the enriched fraction contains about 99.8% ^{238}U, 0.25% of ^{235}U and 0.001% ^{234}U by mass; this is referred to as depleted uranium or DU;

(ii) DU is weakly radioactive and a radiation dose from it would be about 60% of that from purified natural uranium with the same mass;

(iii) The behaviour of uranium and DU in the body is identical radiologically and chemically.

135. The human body contains some 90 micrograms of uranium from the food and water it consumes and the air it breathes. Most of the uranium entering the body (>95 per cent) via inhalation or ingestion is not absorbed, but is eliminated via the faeces. Some 90 per cent of the uranium absorbed into the blood is filtered by the kidneys and excreted in the urine within a few days.

5. Ill effects of DU

136. It is generally agreed that penetrators made with DU have great range and velocity which enable them to penetrate most kinds of armour (including otherwise virtually impenetrable DU armour, as Gulf war friendly fire casualties demonstrated).

137. But their battlefield effectiveness is reportedly undermined by other deadly qualities. DU is said to be a highly toxic and radioactive heavy metal with pyrophoric (flammable) properties: it bursts into flames upon impact. The burning uranium then spreads into the atmosphere, creating a small-scale fallout of aerosolized uranium particles that can be inhaled or ingested from the air or by contact with contaminated materials and sites. These particles can travel anywhere that dust goes.[73]

138. Aerosol is reported to be much more hazardous than naturally occurring uranium particles in soil or food, because it is easily breathed into the lungs. It will stay there for some three to four years delivering radiation doses to the tissues since it is not very soluble in water.[74]

139. DU aerosol particles were discovered in 1979 by workers at the Knolls Atomic Laboratory north of Albany, New York, when they found DU contaminants on their own air-filters 42 km from a factory (that of the National Lead Industries (NL)) which was reported to have been manufacturing DU ordnance and counterweights.

140. According to Dr. Leonard Dietz of Knoll, that was by no means the maximum fallout distance for DU aerosol particles. NL was closed down, decontaminated and dismantled in 1983 for emitting more than 150 micro curies (387 grams) of DU.

141. According to United States Government documents, short-term effects of high doses of DU can result in death, while long-term effects of low doses have been implicated in cancer.[75]

142. Although DU is less radioactive than ^{235}U or plutonium, there is no threshold level of radiation below which an exposed person is safe from radiation damage. Besides, DU also remains an extremely harmful substance with the chemically toxic properties of many heavy metals.[76]

143. It must be stressed that the real problem with DU weapons arises when it is fired and when upon combustion the DU particles are formed and aerosolized. The information provided to Senator Sam Nunn by the United States Air Force[77] to the effect that "... these projectiles [DU] are no more hazardous to store, transport, or employ than those composed of lead or copper", and the view echoed in the United States army report to Congress that "the health risks associated with using DU in peacetime are minimal. This includes risks associated with transporting, storing and handling intact DU munitions and armour during peacetime", simply do not address the real issue of health risks to man and environment after DU munitions have been fired, thus dispersing radioactive DU particles which can be inhaled or ingested.

144. DU has been blamed for affecting health in numerous cases. A few are mentioned here:

(a) Nearly 199,000 veterans, more than one in four who served in the Gulf from August 1990 to July 1991, were reported to have filed disability claims, according to the Department of Veterans Affairs.[78] The illnesses complained of include chronic muscle and joint pain, anxiety, fatigue and memory loss, collectively termed Gulf War Syndrome. The Veterans' Administration (VA) had earlier announced that a preliminary study found Gulf war veterans are nearly twice as likely to develop amyotrophic lateral sclerosis (ALS), known as Lou Gehrig's disease, as other military personnel;

(b) DU is cited as the most likely source of the increased number of birth deformities and cancer in Iraq following the Gulf war in 1991. Cancer appears to have increased between seven and ten times and deformities between four and six times;[79]

(c) Dr. Siegwart Horst-Gunther, President of the International Yellow Cross, took pictures between 1993 and 1995 of birth deformities in Iraq. In 1996 he published them in book form.[80] Dr. Gunther has also additional photographs from his unpublished collection, some showing the birth deformities in Gulf war veteran's children. All these deformities are said to be associated with the use of DU;

(d) Dr. Edward de Sutter, a Dutch eye doctor from Groeningen Hospital, visited Iraq following reports he had read on the Internet about the worrying number of anophthalmos cases - babies born without eyes or with just one. The normal incidence of anophthalmos is 1 in 50 million births. Dr. Mohammed A. Salman, an eye surgeon from Baghdad, had reported nine cases in two years with eight babies missing both eyes. Dr. de Sutter reported[81] having personally examined a number of children born without eyes and having seen pictures of children with grotesque anomalies. His colleague, Roland Bonneux, is reported to have examined children with an absent crown of the skull and who were being kept alive in an incubator. According to Dr. Salman, the fathers of seven of the eight anophthalmos babies born with both eyes missing had been exposed in 1991 to United States antitank weapons feared to have contained DU;

(e) Dr. Hari Sharma, a Canadian chemist, has measured uranium 100 times the average concentration in the urine of British Gulf war veterans more than nine years after the war. This was caused by the inhalation of DU particles. His most recent work, in which he

analysed tissue samples of persons in southern Iraq, the report of which is still in draft form, indicates the presence of DU throughout the body. The author must express alarm at these preliminary findings;

(f) A sergeant (Sgt. Clark) and 12 of his men found themselves coughing and choking in smoke from burning Iraqi tanks hit by 30-mm DU-tipped cannon rounds. He has had chronic problems since the war and his daughter was born in September 1992 with purple welts called hemangioma covering not only her face and body, but some internal organs as well. The child has serious breathing problems and was born without a thyroid. The sergeant stated that a geneticist told him that he could have ingested some radiation and that it could affect sperm cells. Almost three years after his exposure to DU, his urine tested positive for uranium.[82] An army nurse (Ms. Picou) and seven other women in her medical team were exposed to DU from burning destroyed Iraqi armour. Dr. Thomas Callender of Lafayette, Louisana, has examined the nurse and said on a television documentary that her outcome bears a striking similarity to other individuals who had exposures to ingested radioactive elements. She has been given a medical discharge. The 7 nurses and the 12 soldiers probably became contaminated with DU. These 21 people are not included in the official list of those recognized by the United States Government as having been exposed to DU. Given the large tonnage of uranium penetrators in cannon rounds that were fired on the battlefields in Iraq and Kuwait, it is likely that many thousands of other soldiers also became contaminated with DU. The United States army and the Veterans Administration balk at giving urinalysis tests and "in vivo" tests (whole-body counting of gamma rays) to measure the amount of DU in the lungs and other bodily organs of Gulf war veterans;

(g) Laura Flanders, reported an astonishingly high rate of birth defects in the families of Gulf war veterans.[83] According to her, the Veterans Administration conducted a state-wide survey of 251 Gulf war veterans families in Mississippi. Of their children conceived and born since the war, 67 per cent have illnesses rated severe or having missing eyes, missing ears, blood infections, respiratory problems and fused fingers. Flanders suspects that the birth defects are linked to the effects of radiation from DU and infection from sand fly bites. Others blame experimental vaccines, chemical warfare pills, the insect repellent DEET and smoke from oil-well fires for causing birth defects.

6. Secrets

145. There have been claims that the United States Department of Defence (DoD) does not want to admit that DU is harmful because it does not want to be held liable. There have even been more serious accusations that the DoD knew of the ill effects of DU before its massive deployment in the Gulf but that nevertheless, for military expediency, it deliberately closed an eye and sent its ground troops into DU-corrupted battlefields without properly briefing them of the possible ill effects and of any possible precaution that could be taken.

146. According to a survey 82 per cent of Gulf war veterans handled DU or entered captured Iraqi vehicles gutted by DU munitions. Many took DU fragments home as souvenirs.[84]

147. Rosalie Bertell[85] expatiates on the case of 24 Gulf War Syndrome patients who were the only ones examined for uranium lung burden. Using old equipment two named doctors were able to identify measurable lung burdens of DU in 14 of the 24. All records were subsequently "lost". Some urine samples never reached the United States army laboratory in Aberdeen, Maryland. Results of other samples again were "lost". A named doctor, recognized as an expert in internal contamination with radioactivity, who gave this testimony to the United States Congress, subsequently lost his job with the Veterans Administration.

148. In her paper[86] Dr. Bertell quotes at length from a memorandum dated 1 March 1991, addressed by a lieutenant colonel at Los Alamos National Laboratory to a major in the Studies and Analysis Branch, on the effectiveness of DU penetrators against Iraqi armour. After mentioning the continued concern about the use of DU, the writer insists on the need to make a case for its effectiveness as a weapon "lest it become politically unacceptable and thus be deleted from the arsenal". That part of the study was released in April 1999.[87] The memorandum ends by recommending, "we should keep this sensitive issue at mind when after-action reports are written".

149. With this revealed tendency to be economical with the truth, it can hardly be expected to have full and fair disclosure of material information on the ill effects of DU from the military or from DU arms manufacturers. DU is in fact a subject which breeds suspicion and even renowned and reputed institutions involved with studies on DU have had their credibility questioned.

7. The Rand Corporation report

150. The Rand Corporation, a military contractor, was commissioned by DoD to carry out a study on Gulf War Syndrome including literature available on natural uranium which, the report claims, exhibits chemical properties similar to those of DU. The report also claims that little research exists on DU which, it also claims, is actually less radioactive than natural uranium. The authors then assert that the health effects of natural and depleted uranium are analogous since the chemical and radiological properties of the two are analogous.[88] This view is not shared by Dr. Bertell and in May 1999 at the Hague Peace Conference she outlined many health risks associated with DU and expressed her considered opinion that DU can be more radioactive than natural uranium given the higher concentrations at which DU is found.[89] Since nothing conclusive was found linking ill health to natural uranium, the Rand Corporation concluded that DU should have no ill effects on health as well.

151. Although the Rand Corporation report is said to have reviewed an extensive body of literature it was not considered comprehensive by the National Gulf War Resource Centre. The Centre's research director presented a report in June 1999[90] outlining matters that the Rand Corporation report had ignored, citing some 62 sources not reviewed by Rand. Attention was drawn to the paucity of references by Rand to studies demonstrating clear health risks to humans, such as the one conducted by the Armed Forces Radiobiology Research Institute (AFRRI), which found "possible relationships between DU and neurological, immunological, carcinogenic, genotoxic, and mutagenic effects".[91]

152. The notion that he who pays the piper chooses the tune may not necessarily be an impossible obstacle when it comes to intellectual studies carried out by professionals, including report writers. But the perception of independence appears to be doubly flawed where the authors of a report on the possible ill effects of a particular weapon happen to be military contractors.

8. The Royal Society findings

153. An investigation by scientists of the Royal Society for the United Kingdom Ministry of Defence (MoD) found no evidence of a link between DU and cancer, whilst conceding that further research was needed.[92] The findings of the Royal Society have been severely criticized by certain war veterans on the ground that the scientific research was incomplete and inadequate, some even accusing the Royal Society of cover-up and other grave misdeeds. Others felt that the MoD had been withholding historically relevant official documents and that officials were selectively steering the outcome of the investigation.

154. One criticism against the Royal Society was that it was trying to argue against the findings of people who had been on the ground in the Gulf in 1991 taking measurements and who had found DU contamination in veterans and had documented the illnesses they had suffered for the previous 10 years.

155. Doug Rokke, a former United States army officer and physicist, was the officer in charge of DU cleanup after the Gulf war. He developed health problems within two weeks of his return from the Middle East. A urinalysis conducted in March 1994 revealed uranium 2,000 per cent beyond normal levels.[93] He was perturbed when he learnt that certain reports,[94] which he had told the Royal Society existed, could not be obtained by the latter from either MoD, the United States Department of Defence or the VA although the documents are cited in numerous DoD reports. This prompted Mr. Rokke to tell the Royal Society that its report was based on incomplete information since essential information had been wilfully withheld.

156. In March 2002, upon the recommendations of the Royal Society, the MoD decided to conduct a study to identify any link between exposure to DU and ill health.

9. European Committee on Radiation Risk

157. The European Committee on Radiation Risk (ECRR) was formed in 1997 to investigate and report on the considerable disagreement existing among expert bodies over the health effects of low-level radiation. The Committee consists of scientists and risk specialists from within Europe but takes evidence and advice from scientists and experts based in other countries. Its remit was to make no assumptions whatever about preceding science and to remain independent from the previous risk assessment committees such as the International Commission on Radiological Protection (ICRP), the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), the European Commission, and risk agencies in EU States.

158. In its 2001 recommendations[95] the ECRR highlighted the dissonance between the risk models of the ICRP and the epidemiological evidence of increased risk of illness, particularly cancer and leukaemia, in populations exposed to internal radioactive isotopes from

anthropogenic sources. It found "unequivocal evidence of harm from internal irradiation at low dose" from studies of infant leukaemia and increased minisatellite DNA mutations following Chernobyl. Those studies, according to the ECRR, undermine the ICRP risk models by upward factors of between 100-fold and 1,000-fold for internal purposes.

159. It is not within the remit of this paper, nor is it within the competence of the author, to say whether the ECRR or the ICRP is right. Suffice it to say that the chasm existing between the views of those two expert bodies is worrying.

10. Pending Issues

160. There are a number of assessments of DU related to health and environmental concerns that are pending at this time. Review of completed studies based on these assessments would greatly assist in the determination of the full extent and long-term impact of DU on health. A few of these pending assessments are set down.

(a) Uranium inquiry ordered by MoD

161. According to a British newspaper,[96] "The Ministry of Defence is to carry out an inquiry into the potential effects on the health of the Armed Forces handling depleted uranium ammunition, after concerns were raised about testing with depleted uranium shells in the Kirkcudbright firing range in Dumfries and Galloway." The article adds:

> "The Ministry of Defence has previously refused to accept any conclusive link between cancer and the use of depleted uranium ammunition.
>
> "However, after recommendations from the Royal Society, the Ministry has now decided to conduct a study 'to identify any links between exposure to depleted uranium and ill-health', including a review of the 'effects of depleted uranium inhalation on the pulmonary lymph nodes'.
>
> "The Ministry of Defence inquiry will cover the effects of used depleted uranium shells on soil and marine environments. A key development is that the inquiry will also investigate safer alternatives to the use of depleted uranium."

(b) WHO and DU

162. In 1999, following public concern about potential ill effects of exposure to DU arising from military conflicts in the Gulf and the Balkans, WHO carried out a review of scientific literature considering health risks from different DU exposure situations. It found that inhalation was the most likely route of DU intake following the use of DU munitions in armed conflict. DU particles in the environment would be re-suspended in the atmosphere by wind or other forms of disturbance and ingestion could happen if drinking water were contaminated by DU. DU could also enter the systemic circulation through open wounds or from embedded DU fragments. Potentially, DU has chemical and radiological toxicity, with the kidneys and the lungs as target organs. Health consequences would be determined by the physical and chemical nature of the DU (soluble or insoluble particles) and the level and duration of exposure.

The review found that only military use of DU was likely to have any significant impact on the environment. It concluded that there were gaps in the knowledge about DU and further research was recommended to allow a better risk assessment and that information could come from studies of populations exposed to elevated concentrations of uranium in water.

163. On 14 September 2001 WHO held a press briefing to announce that it was effecting a mission to Iraq to cover four proposals suggested by the Iraqi health officials:

- health surveillance of cancers;
- health surveillance of congenital malformations and renal diseases;
- studies to explore health effects of environment risk factors, including DU;
- implementation plan for cancer control.

(c) UNEP and DU

164. On 27 March 2002 the United Nations Environment Programme (UNEP), which administers the Secretariat for the Basel Convention, [97] reported that a new study of six sites in Serbia and Montenegro that were struck by DU munitions during the 1999 Kosovo conflict confirmed the presence of widespread, but low-level, DU contamination at five sites. [98] The UNEP study, which was carried out jointly with the International Atomic Energy Agency (IAEA) and WHO, found that there was no immediate radioactive or toxic risks for the environment and for human health but recommended precautionary measures. The most important concern is the potential for future groundwater contamination by corroding DU penetrators. Those recovered by UNEP shared a mass decrease through corrosion of some 10-15 per cent, which renders necessary the yearly monitoring of the underground water. UNEP was surprised to detect, through modern air sampling techniques, airborne DU particles more than two years after the cessation of hostilities. Development projects on those sites would have to be curtailed because of the risk of stirring up potentially toxic soil and dust.

165. UNEP has been invited to effect a visit to Afghanistan in February this year.

11. Moratorium

166. There have been many requests for a moratorium on the use of DU munitions from a number of quarters because of the conclusions of scientific studies.

167. On 17 January 2001 the European Parliament voted to urge NATO to suspend use of DU munitions pending the results of an independent study on the potential health risks of such weapons. This followed reports blaming DU armour-piercing bullets for a string of unexplained cancer deaths and other health problems among soldiers who served in Bosnia and Kosovo in the 1990s.

168. A week before, a similar call for a moratorium from Italy and Germany was reported to have been rebuffed by NATO.

169. On 1 December 2001 Italy reiterated to NATO the call for the institution of a moratorium on the use of DU weapons until more studies were done. This followed the deaths of eight of its soldiers serving under NATO who had died of leukaemia within a period of 18 months. Italy's request for a moratorium was supported by France and Portugal. France then decided to launch an inquiry into the effects of DU on its soldiers in Kosovo whereas Portugal decided to withdraw its soldiers.

170. In 1999 Canada stopped using its own DU weapons and has taken steps to address the concerns of its sick veterans. It has, however, rejected calls for a ban on DU weapons.

171. Considering the disturbing reports on the ill effects of DU weapons in the Gulf and the Balkans, it is saddening to note that so far appeals for a moratorium coming from different quarters have not yet prevailed. Killing first and asking questions later has, however, never been a sensible solution.

III. CONCLUSION

172. Most of the weapons covered by this working paper, although capable of use anywhere, are designed for or meant to be used in enemy territory. It is therefore easier to ignore the "dirtiness" of such weapons. Worse still, the use of such weapons is not calculated to match with a measure of proportionality, hence legality, the degree of the hostile attacks. There are growing fears that in the name of repression of "terrorism" and preservation of "security" retaliatory measures well beyond what is permissible in international law are being planned.

173. "Security" in its wider and often perverted sense will lead to the doing of unacceptable things. The recent use of certain weapons falling within the purview of this working paper and reports of new weapons development and their eventual deployment appear as grotesque as they are unthinkable. Yet we have seriously to start imagining the harrowing effects of the use of "small nukes" against nations which some may consider too hostile or too "rogue". Beyond the physical and material harm that will be caused, the psychological "firewall" would have been broken and the spiral of proving to the world who can be more rogue than rogue itself would have been triggered.

174. Confronted with this new notion of "security" which flouts all humanitarian norms, human rights may not appear to some to be a matter of prime concern or of weighty importance. It is therefore all the more vital that the urgent message be restored that peace cannot be achieved by the threat or the use of such horrific weapons and that real security resides in legality and adherence to international humanitarian law and norms as well as respect for human rights which are of universal application. Otherwise, one may find oneself hoisted by one's own petard. But even then, poetic justice has never been the leitmotiv of humanitarian and human rights law. Legality is.

175. Delimiting all the contours of the mandate within the allotted time frame has not been possible. Apart from the fact that the mandate is wide, new findings and new developments are unfolding every day. Other weapons of grave concern falling within the mandate have come to the attention of the author. These would include the so-called "space weapons", like the directed energy weapons and the mid-infrared advanced chemical laser, but evaluation of these will have to wait for some future time.

Notes

[1] The appendix to the report of the Secretary-General lists all major treaties or declarations since 1868 banning weapons so such a list will not be repeated here.

[2] Article 23 of the Hague Convention 1899 uses the term "superfluous injury" whilst the same article 23 of the later Hague Convention 1907 uses the term "unnecessary suffering."

[3] Convention on the Prevention and Punishment of the Crime of Genocide of 9 December 1948.

[4] Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment.

[5] *ICJ Reports, 1996.*

[6] Ibid., para. 25.

[7] Universal Declaration of Human Rights, adopted and proclaimed by General Assembly resolution 217 A (III) of 10 December 1948.

[8] The right to health is also provided for in article 12 of the International Covenant on Economic, Social and Cultural Rights. This article also requires efforts to reduce stillbirth and infant mortality, as well as the duty to improve the environment in ways supportive of health.

[9] Declaration on the Protection of All Persons from being subjected to Torture and other Cruel, Inhuman or Degrading Treatment or Punishment, adopted by the General Assembly in its resolution 3452 (XXX) of 9 December 1975.

[10] The Inter-American Convention to Prevent and Punish Torture, adopted at Cartagena, Colombia, on 9 December 1985.

[11] While found in both the 1899 and 1907 Hague Conventions, it is usually cited as preambular paragraph 8 of the Hague Convention of 1907.

[12] The four Geneva Conventions which were adopted on 12 August 1949 by the Diplomatic Conference for the Establishment of International Conventions for the Protection of Victims of War are the Conventions:

(i) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field;

(ii) for the wounded, sick and shipwrecked members of armed forces at sea;

(iii) relative to the Treatment of Prisoners of War;

(iv) relative to the Protection of Civilian Persons in time of War.

[13] Protocol relating to the Protection of Victims of International Armed Conflicts (Protocol I) and of Non-International Armed Conflicts (Protocol II).

[14] The author recognizes that common article 3 was originally intended to bring standards of humanitarian law into situations of armed conflict "not of an international character". However, owing to the opinion of the ICJ as set out below, this article is now considered the minimum in any type of war and for any State, and so is cited here as exemplary.

[15] Military and Paramilitary Operations in and against Nicaragua (*Nicaragua v. United States of America*), Merits Judgment, *ICJ Reports 1986*, p. 114. The Court cited its 1949 Corfu Channel case for the obligation of States to respect rules constituting "elementary considerations of humanity".

[16] Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, Geneva, 10 October 1980.

[17] The "Basic Rule" is the title of article 48.

[18] The author notes that similar provisions have been set out in Additional Protocol II relating to non-international armed conflicts.

[19] *ICJ Reports 1996*. The Court also discussed the following provisions of customary humanitarian law relating to weapons: application of the Martens Clause to weapons (para. 87); prohibition of killing or targeting civilians (para. 93); prohibition of weapons causing undue suffering (paras. 78, 92 and 95); and the prohibition from endangering or damaging the environment (paras. 32-33, 35).

[20] Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques of 18 May 1977 to which the United States is a Party (ENMOD).

[21] Resolution on the protection of the environment in times of armed conflict.

[22] Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, Geneva, 10 October 1980.

[23] The Protocol on Prohibition or Restrictions on the Use of Mines, Booby-traps and Other Devices, as amended on 3 May 1996, is one such protocol.

[24] Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction, 18 September 1997.

[25] Resolutions 1653 (XVI) of 24 November 1961, 33/71B of 14 December 1978, 34/83G of 11 December 1979, 35/152D of 12 December 1980, 36/921 of December 1981, 45/59B of 4 December 1990 and 46/37D of 6 December 1991.

[26] Paragraph 95 of the Advisory Opinion (emphasis added).

[27] Paragraph 97 of the Advisory Opinion.

[28] Paragraph 105 (2) (c).

[29] Carl Sagan and Richard Turco, *A Path No Man Thought*, Random House, 1990, quoted at *www.mothersalert.org/nuclearwinter.html*.

[30] Signed in Moscow on 24 May 2002.

[31] Sune K. Bergstrom, Nobel laureate in 1982 in physiology and medicine.

[32] Alan Robock "New models confirm nuclear winter". *Bulletin of the Atomic Scientist*, quoted by Dean Babst in "Preventing an accidental nuclear winter" at *mothersalert.org/nuclearwinter.html*.

[33] M.V. Ramana of Princeton University, New Jersey, in *New Scientist* magazine.

[34] The Convention on the Physical Protection of Nuclear Material 1980 which entered into force on 8 February1997.

[35] 729 *UNTS* 161, entered into force 5 March 1970 (NPT).

[36] United Nations Security Council resolution 984 (1995) on security assurances.

[37] Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water 1963.

[38] Mr. Kuznetsov, head of the Soviet delegation at the Disarmament Committee meeting held in Geneva on 29 August 1962.

[39] Hsinhua, the official news agency of the People's Republic of China.

[40] Cited in "People of the World Unite, for the Complete, Thorough, Total and Resolute Prohibition and Destruction of Nuclear Weapons", Foreign Languages Press, Peking, 1963.

[41] "Sandia labs says B61-11 (bunker buster) nuclear weapon delivered", DU-WATCH.

[42] William Arkin, *Los Angeles Times*, 10 March 2002.

[43] Reuters, 29-30 May 2002.

[44] Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction 1993, which became operative on 29 April 1997.

[45] Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction 1972.

[46] Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, Geneva, 17 June 1925.

[47] Jean Pascal Zanders, E. Karlsson et al., *Risk Assessment of Terrorism with Chemical and Biological Weapons*.

[48] These rules have long been rules of customary humanitarian law.

[49] These rules have also long been rules of customary humanitarian law.

[50] Article 51 (7).

[51] Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction, 18 September 1997.

[52] See *http://alternet.org/story.html?storyID=12713*.

[53] Eric Prokosch, *The Technology of Killing: A Military and Political History of Antipersonnel Weapons*, Zed Books 1995, p. 82.

[54] Lt. Col. Gary W. Wright, "Scatterrable Munitions = Unexploded Ordnance (UXO) = Fatricide", United States Army War College Study Project, 22 March 1993.

[55] Bruce Shoemaker, *Legacy of the Secret War*, Mennonite Central Committee.

[56] "Afghanistan - The World's Guilty Secret", *Amnesty International Journal*, January/February 1996.

[57] "Drop Today, Kill Tomorrow, Cluster Munitions as Inhumane and Indiscriminate Weapons", Mennonite Central Committee.

[58] Weapons of Mass Destruction/United States is Dropping World's Biggest Non-Nuclear Bomb in Afghanistan.

[59] General Peter Pace, Vice-Chairman of the United States Joint Chiefs of Staff.

[60] Ric Finke, "What are daisy-cutters? The military's final solution".

[61] The New Lexicon, *Webster's Dictionary*.

[62] Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to be Excessively Injurious or to Have Indiscriminate Effects.

[63] Health Risks of Using Depleted Uranium, Venik's Aviation, 3 November 2001.

[64] WHO, Fact Sheet No. 257 on depleted uranium.

[65] Laka Foundation, document 511-5028.

[66] G. Bukowski and D.A. Lopez, "Uranium Battlefields Home and Abroad: Depleted Uranium Use by the United States Department of Defense", March 1993.

[67] Radioactive Desert Storm and its Global Effects.

[68] The author was surprised to find a large number of anti-DU groups and activists - many of whom are leading research scientists or lawyers specializing in humanitarian law. Similar groups and activists have also organized against cluster bombs and some of the other weapons. This activity can be understood as an aspect of the "dictates of the public conscience" of the Martens Clause.

[69] Paul Brown, "Gulf War Debris is Radioactive", *The Guardian*, 18 September 1991.

[70] AEA Secret Report, *The Independent,* November 1991.

[71] "NATO confirms to the UN use of DU during the Kosovo conflict", press release by the United Nations Environment Programme and the United Nations Centre for Human Settlements, 21 March 2001.

[72] Dai Williams, "Depleted Uranium Weapons in 2001-2002: Mystery Metal Nightmare in Afghanistan?", 31 January 2002, at *http://www.eoslifework.co.uk/du 2012.htm*.

[73] "Did the US use Chemical and Radiological Warfare in the Gulf War?", paper presented by Dr. Rosalie Bertell at the Joint Meeting of the Canadian Anthropology Society and the American Ethnological Society at the University of Toronto, Canada, 7 May 1998.

[74] Ibid.

[75] "Metal of Dishonor - Depleted Uranium. How the Pentagon Radiates Soldiers and Civilians with DU weapons", selections compiled and edited by the DU Education Project, International Action Centre, New York, 1997.

[76] Military Toxics Project (DU Citizens Network), "The United States Army's Use of Depleted Uranium and its Consequences for Human Health and the Environment", 1996.

[77] Lt. Col. W. M. Washabaugh, United States Air Force, Congressional Inquiry Division, Office of Legislative Liaison, letter to Sen. Sam Nunn, Chairman, Senate Armed Services Committee, 8 November 1990.

[78] Associated Press, 17 February 2002.

[79] Ross B. Mirkarini, The Arms Control Research Centre, from his report: "The environmental and human health impacts of the Gulf region with special reference to Iraq", May 1992.

[80] "*Uranium Projectiles - Severely Maimed Soldiers, Deformed Babies, Dying Children*", Ahriman Verlag, Netherlands.

[81] *Dutch Journal of Medical Science*, 26 May 2001, translated into English by Henk van der Keur.

[82] NBC TV Dateline programme, "Deadly Fire", 22 February 1994.

[83] L. Flanders, "A lingering sideness", *The Nation*, 29 January 1995, pp. 94-96.

[84] Survey carried out by Victor Sylvester of Operation Desert Shield/Desert Storm between 1991 and 1995 involving 10,051 war veterans. Cited by Bertell, op. cit.

[85] Bertell, op. cit.

[86] Ibid.

[87] *A Review of the Scientific Literature as it Pertains to Gulf War Illness, Volume 7 - Depleted Uranium.*

[88] It must be noted that the health effects of natural uranium and DU are also considered to be analogous by WHO in its Fact Sheet No. 257.

[89] Bertell, op. cit.

[90] Dan Fahey, "DoD Analysis: The Good, the Bad and the Ugly", June 1999, at *http://www.globaldialog.com/KornKven/DOD_Anaysis_II_Fahey.pdf*.

[91] Ibid.

[92] Macer Hall, "Veteran's alert on uranium shells", DU Info Bulletin No. 25 at *www.dailytelegraphnews.com*.

[93] Physicians for Social Responsibility, Depleted Uranium Weapons, July 1999.

[94] Operation Desert Storm DU (Battlefield) Assessment Team Reports for the United States Army Chemical School.

[95] The recommendations are entitled "The Health Effects of Ionising Radiation Exposure at Low Doses and Low Dose Rates for Radiation Protection Purposes".

[96] *The Times*, 15 March 2002.

[97] Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

[98] The first study was carried out in Kosovo in 2001.

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OTHER HUMAN RIGHTS ISSUES

The question of the trade, carrying and use of small arms and light weapons in the context of human rights and humanitarian norms

Working paper submitted by Ms. Barbara Frey in accordance with Sub-Commission decision 2001/120

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Introduction

1. In its decision 2001/120 of 16 August 2001, the Sub-Commission on the Promotion and Protection of Human Rights decided, without a vote, to entrust Ms. Barbara Frey with the task of preparing, without financial implications, a working paper on the question of (a) the trade and carrying of small arms and light weapons; and (b) the use of such weapons in the context of human rights and humanitarian norms for consideration at its fifty-fourth session.

2. This paper will provide a preliminary examination of violations of international human rights and humanitarian law related to the availability and misuse of small arms and light weapons. The paper will first define what is meant by small arms and light weapons and establish the scope of review. The paper will then provide a general overview of the problem of small arms followed by a review of the action taken thus far by the international community to address the problem in all its facets. The paper will then analyse in further detail the relationship between availability of small arms and human rights violations, and how current standards in international human rights and humanitarian law address those violations. The paper concludes with recommendations for action by international human rights mechanisms to begin to address the grave human rights consequences of small arms and light weapons.

I. SCOPE AND DEFINITIONS

3. This paper is an effort to begin to focus on the proliferation, availability and misuse of small arms from the human rights perspective. The paper provides a preliminary examination of three questions:

1. What is the relationship between the availability and misuse of small arms and light weapons and human rights violations?

2. How does the current body of human rights and humanitarian law address issues regarding the availability and misuse of small arms and light weapons?

3. What further action is necessary to prevent human rights abuses caused by the availability and misuse of small arms and light weapons?

4. This paper adopts the definition of small arms and light weapons used in the 1997 report of the Panel of Governmental Experts on Small Arms (A/52/298, annex). According to the Panel of Experts, small arms are those weapons designed for personal use, light weapons are designed for use by several persons serving as a crew (ibid., para. 25). The report defined:

(a) Small arms as including: revolvers and self-loading pistols; rifles and carbines; sub-machine guns; assault rifles; and light machine guns (ibid., para. 26);

(b) Light weapons as including: heavy machine guns; hand-held under-barrel and mounted grenade launchers; portable anti-aircraft guns, portable anti-tank guns, recoilless rifles; portable launchers of anti-tank missile and rocket systems; portable launchers of anti-aircraft missile systems and mortars of calibres of less than 100 mm (ibid.);

(c) Ammunition as including: cartridges (rounds) for small arms; shells and missiles for light weapons; mobile containers with missiles or shells for single-action anti-aircraft and anti-tank systems; anti-personnel and anti-tank grenades; landmines; and explosives (ibid.).

5. The term "arms transfers" refers to all arms transferred outside the control of the producing State. The term is broader than "arms trade" because it includes not only commercial sales but all exchanges of arms, including exchanges under aid programmes and military alliances, exchanges between private citizens, and other non-monetary arrangements.[1]

II. AN OVERVIEW OF THE PROBLEM OF SMALL ARMS AND LIGHT WEAPONS

6. Hundreds of thousands of men, women and children are killed or injured each year by small arms and light weapons. These weapons, which are cheap, easy to transport and easy to operate, are used to violate human rights in every comer of the globe. Small arms and light weapons have many lawful uses, including use by law enforcement to maintain the peace and for self-defence. Unfortunately, these same weapons are used by Governments, paramilitary forces and insurgent groups as the main instruments of death in armed conflict. Even in peacetime, small arms are sometimes used by Governments to terrorize and control populations, and they are also used by criminals and terrorists to commit violent acts.

7. Circulating from hand to hand throughout the globe, there are at least 550 million small arms and light weapons (hereinafter referred to as "small arms") that cause at least 500,000 deaths each year.[2] Studies indicate that for every fatal small arms-related injury, there are likely to be two to three times as many non-fatal injuries.[3] The death and injury of productive individuals places a huge burden on societies, and serves as a barrier to social and economic development. While small arms proliferation is not a new phenomenon, weapons today are available to almost anyone who has the will to obtain them. Arms strategically delivered to military or paramilitary groups during the cold war have exchanged hands many times in the years of fragmentation that followed. The human cost of such easy access to weapons is enormous.

8. Small arms are used to facilitate an entire range of human rights abuses, including rape, enforced disappearance, torture, forced displacement, and forced recruitment of children soldiers. Due to their increasing availability, small arms play a critical role in many abuses against personal dignity. Even in genocidal conflicts, where people have been hacked to death with machetes or other non-ballistic instruments, the victims are often initially rounded up with firearms. Heavily armed individuals also provide the security environment in which atrocities can be committed at will by various other means. An increase in expenditures due to deteriorating security conditions also results in decreased support for economic, social and cultural rights.

9. Civilians have become the deliberate targets of small arms-related violence during armed conflict. Small arms-related violence against civilians and non-combatants in situations of armed conflict is completely at odds with internationally recognized legal protections granted to non-combatants under international human rights and humanitarian law.[4] Despite these legal protections, a disproportionately high percentage of wartime small arms casualties are civilians.

A study in Croatia, for instance, determined that civilian deaths may have accounted for up to 64 per cent of the 4,339 fatalities studied during the war in 1991/92.[5] Another study reported that at least 34 per cent of patients in ICRC field hospitals in Afghanistan, Rwanda, Chechnya, and the border regions of Kenya and Cambodia were civilians wounded by bullets.[6] Surveys carried out in Sierra Leone showed that almost 60 per cent of all war injuries were gunshot related, and that 11 per cent of all victims were under 15, and 43 per cent were women.[7]

10. The growing availability of small arms has been associated with the increased incidence of internal conflicts (A/52/298, annex, para. 14). While accumulations of small arms alone may not create the conflicts in which they are used, the availability of small arms tends to exacerbate conflicts by increasing the lethality and duration of violence, and by increasing the sense of insecurity which leads to a greater demand for weapon (ibid., para 17). Some commentators consider the easy availability of small arms to be a "proximate cause" of armed conflict, transforming a potentially violent situation into a full-scale conflict.[8]

11. While small arms are frequently associated with armed conflict, arms-related violations occur in many other contexts. These violations are especially prevalent as a result of post-conflict insecurity, crime and banditry, and the militarization of refugee camps and camps for internally displaced persons (IDPs). Arms-related deaths and injuries do not decrease significantly even when wars come to an end. When small arms remain available in post-conflict societies, injuries and deaths continue at high levels. In El Salvador, Honduras and Guatemala, for instance, where only a small percentage of small arms were collected from former combatants, the rate of firearm-related deaths and injuries in the post-conflict era remains as high as in some of the most violent zones of armed conflict.[9]

12. The presence of small arms aggravates forced displacement patterns. With AK-47s in hand, for instance, thugs who in the past may have carried out cattle raids and looting in pastoral communities in Ethiopia, Kenya, Somalia, the Sudan and Uganda have resorted to increased levels of violence, including the use of systematic rape and killing, to drive people from their homes and communities. Communities displaced by such violence are not only directly threatened with death and injury, but the ongoing threat of violence from the availability of weapons bars them from access to food, shelter, health care, education and other basic needs.[10]

13. The militarization of refugee and IDP camps has become a serious problem for the international community. Safe havens created to aid victims of war have instead become breeding grounds for armed groups. Arms are made available at these sites by former combatants, local dealers and active militias.[11] In some cases, host governments support the flow of arms into camps that are used to launch cross-border, counter-insurgency operations. Small arms have been smuggled into camps under the direct cover of "humanitarian assistance".[12] Militarization is further heightened when refugees arm themselves against perceived or actual violence in the camps. The insecurity in the camps is a threat to regional stability, as camps become marketplaces for arms that fuel civil wars, crime and terrorism.[13]

14. Children, especially, are victims of human rights violations that result from the availability and misuse of small arms. UNICEF estimates that 2 million children were killed in armed conflict in the 1990s, many with small arms and light weapons (S/1999/957, para. 16).

An estimated 300,000 children under the age of 18 are exploited as soldiers in armed conflicts.[14] The simplicity of use of small arms turns even young children into deadly killers. A 19-year-old soldier in northern Uganda testified, "I especially know how to use an AK-47 twelve-inch, which I could dismantle in less than one minute. When I turned 12 they gave me an RPG [rocket-propelled grenade], because I had proved myself in battle".[15] Fully automatic assault rifles will fire many rounds of ammunition; an AK-47 can fire up to 600 rounds per minute. Besides being killed and injured by firearms, children are often affected by the secondary costs of armed violence, including malnutrition, disease and preventable illness.[16]

15. Small arms-related violence has had a devastating impact on the humanitarian aid community. Humanitarian workers, including United Nations civilian staff members, are increasingly at risk as targets of acts of firearm-related violence including killings, hostage-taking, sexual assault, armed robbery, and arbitrary arrest and detention. The United Nations reported that 185 civilian staff members died between 1992 and 2000, most from firearm-related violence.[17] Under threat of violence from armed militias, humanitarian agencies are often forced to turn over goods and materials that were intended for aid operations. Increasing threats to United Nations staff members have resulted in an increased focus on human security in United Nations field operations.

16. The small arms problem has implications for the fields of security and disarmament, public health, development, crime-control, humanitarian assistance and, of course, human rights. In the Millennium Report 2000, Secretary-General Kofi Annan stated that "Small arms proliferation is not just a security issue; it is also an issue of human rights and of development. The proliferation of small arms sustains and exacerbates armed conflicts. It endangers peacekeepers and humanitarian workers. It undermines respect for international humanitarian law. It threatens legitimate but weak governments and it benefits terrorists, as well as the perpetrators of organized crime."[18]

17. Policy makers concerned with the increasing violence wrought by small arms are developing various approaches to the problem. The "supply-side" approach focuses on increased accountability and government control of small arms from production through end-use certification. This approach aims at the prevention of small arms transfers to States and non-State actors that are likely to commit serious violations of human rights and humanitarian law. Proponents of this approach seek to reduce the flow of arms through various means, including sanctions, public pressure to prevent transfers to human rights violators, technical methods such as weapons-marking, and more post-transfer oversight.[19]

18. An emerging humanitarian approach to the arms proliferation issue focuses on the impacts of armed violence, especially on non-combatants and vulnerable groups. This approach starts from the assumption that many countries in conflict-ravaged areas are already saturated with small arms and that even if the "supply-side" efforts are successful at curtailing a new flow of weapons, there is still a great need to take effective steps to reduce the "demand" for such weapons and to curb their use. These steps include attention to root causes of violence, training of armed forces - including identifiable non-State armed groups - on the basic norms regarding the use of small arms, and other practical interventions.[20]

19. The following section illustrates that the efforts of States to develop regional and international standards to regulate the proliferation of small arms generally reflects the supply-side approach.

III. ACTION BY THE INTERNATIONAL COMMUNITY TO REGULATE THE TRANSFER OF SMALL ARMS AND LIGHT WEAPONS

20. Governmental authorities, alarmed by the risks to public safety and national security that have resulted from the proliferation of small arms in the post-cold war era, have begun to take some steps to regulate the transfer of small arms, particularly into the hands of non-State actors, including criminals and insurgents. Most of these efforts have been directed at the regulation of "illicit" transfers of weapons - meaning transfers that are not authorized by a State party. Unfortunately, this emerging system of regulation does not address the violence that results from "legal" transfers - including State-approved transfers of arms into situations where they are likely to be used to commit gross human rights abuses, war crimes, or crimes against humanity.

21. There are few binding international standards regarding the manufacture, transfer or misuse of small arms and light weapons. Security Council decisions to impose arms embargoes, taken under Chapter VII of the Charter of the United Nations, are binding on all Members of the Organization. Under these embargoes States are prohibited from transferring weapons to identified parties and States must also take the necessary measures to implement, apply and enforce the embargo internally as against private actors within their jurisdiction. The Security Council has imposed arms embargoes approximately 15 times since 1965. Violations against these embargoes are well documented and the Security Council has recently begun to try to improve methods of supervision.[21] Besides embargoes, the only binding international standards on firearms are in the Protocol against the Illicit Manufacturing of and Trafficking in Firearms, Their Parts and Components and Ammunition, supplement to the United Nations Convention against Transnational Organized Crime ("Firearms Protocol"), adopted in June 2001 by the General Assembly in its resolution 55/255. The Firearms Protocol is an effort to develop harmonized marking, licensing and record-keeping systems to help law enforcement and customs officials distinguish between legal and illegal weapons shipments. The Firearms Protocol does not apply to State-to-State transfers of weapons.

22. A group of Nobel Peace Prize laureates has been joined by several non-governmental organizations in proposing a Framework Convention on International Arms Transfers, setting forth a global code of conduct to regulate arms transfers. Under the Framework Convention, certain core principles would be binding on all States. The Framework Convention elaborates limitations on States' freedom to transfer arms by codifying existing rules in international law, including human rights and humanitarian norms.[22]

23. Regional organizations have also adopted some binding standards to control the dangerous proliferation of small arms. The Organization of American States (OAS) was the first regional system to adopt a treaty to prevent the illicit manufacturing of and trafficking in arms, the Inter-American Convention against the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives and Other Related Materials, 1997. The European Union sets forth human rights and humanitarian considerations in its requirements regarding arms transfers. The European Union's Joint Action on Small Arms, for example, commits member

States to supply small arms "only to governments (either directly or through duly licensed entities authorized to procure weapons on their behalf) in accordance with appropriate international and regional restrictive arms export criteria".[23] Among the arms export criteria considered in this Joint Action is the respect of human rights in the country of final destination.[24]

24. In addition to binding standards, there have been several significant non-binding political commitments addressing small arms, especially the illicit production and transfer of small arms. The most visible of these commitments is the Programme of Action adopted by the United Nations Conference on the Illicit Trade in Small Arms and Light Weapons in All Its Aspects (A/CONF.192/15, chap. IV), held in July 2001 in New York. The Programme of Action was a consensus agreement that remains open to interpretation by individual States. Like the Firearms Protocol, the Programme of Action focuses only on illicit transfers of small arms and light weapons. It commits States to take steps to establish adequate national controls on production, transfers and brokering activities. The Programme of Action calls for States to undertake measures to ensure reliable marking on each small arm, as well as record-keeping and tracing, stockpile security, disposal and destruction of surplus and seized weapons, and support for weapons collection and disarmament, demobilization, and reintegration. The Programme of Action commits States to a review conference in 2006.

25. While the Programme of Action is undoubtedly a step forward in the commitment of States to control illicit transfers of small arms, from a human rights perspective it is notably silent on several key issues. The Programme of Action does not address the misuse of weapons, only their transfer. The Programme of Action does not address State-to-State, or "legal" transfers of small arms that are likely to end up being used to commit serious human rights abuses. It does not prohibit arms sales by States to non-State actors. It does not call for controls on the private ownership of weapons. In fact, while acknowledging that trade in arms "sustains conflict, exacerbates violence, contributes to the displacement of civilians, undermines respect for international humanitarian law, impedes the provision of humanitarian assistance to victims of armed conflict and fuels crime and terrorism" (ibid., para. 5), the drafters of the Programme of Action assiduously avoid mentioning the term "human rights". In the words of one NGO observer at the Conference, "Clearly, most States are not prepared to put human security before national security."[25]

26. Several non-binding political commitments at the regional level have been more forthright in their consideration of human rights criteria. The 1998 European Union Code of Conduct for Arms Exports, for instance, includes human rights criteria for arms exports.[26] The OSCE Document on Small Arms and Light Weapons (2000) requires, among other measures, that member States of the Organization for Security and Cooperation in Europe avoid export licences where there is a clear risk that the small arms may be used to violate human rights and fundamental freedoms.[27]

27. Other non-binding regional commitments have taken various approaches to curb illicit trafficking in small arms, but do not make specific reference to human rights criteria regarding weapons transfers. The Economic Community of West African States (ECOWAS), for instance, adopted a moratorium in 1998 on the import, export and manufacture of light weapons.[28] The moratorium, which has no provisions for implementation at the national level, was renewed for a

second three-year period in 2001. In the Americas, the OAS Model Regulations articulate common procedures for controlling the international movement of firearms, but do not include human rights criteria.[29]

28. In summary, over the past few years there has been some progress in the development of measures to control the transfer of small arms and light weapons. While most of these efforts have been non-binding political agreements, they do offer evidence of an emerging international consensus regarding the need for regulation of, at least, illicit arms transfers. Still, States have avoided discussing many questions that are key to the protection of human rights, including how to address the correlation between the availability of arms and increased human rights abuses; how existing human rights commitments should limit arms transfers - legal or illicit - by States; how to prevent the misuse of arms by State agents; and what is the State's responsibility to prevent small arms-related violence perpetrated by non-State actors, including individuals. This paper will begin to address some of those unanswered questions.

IV. AVAILABILITY AND MISUSE OF SMALL ARMS IN RELATION TO HUMAN RIGHTS VIOLATIONS

29. The availability of small arms threatens the full realization of all human rights in times of war and in times of peace. From individual homicides to large-scale massacres, small arms have become the weapons of choice for those who abuse human rights. Most of the grave human rights violations committed by State agents - including security personnel, law enforcement and paramilitary groups acting with the complicity of the State - are committed with or facilitated by small arms. Likewise, small arms facilitate the abuses committed by non-State actors, including organized opposition groups, terrorists and criminal networks, during armed conflict or in relative peacetime. The unregulated private ownership of firearms also results in hundreds of thousands of deaths and injuries annually, and brings into question what due diligence is required of States to protect residents from firearm-related violence and its consequences.

30. The increasing availability of small arms around the world is attributed to several factors including an increase in the number of legal weapons producers in all regions of the world, the transfer of technology and manufacturing licences from existing producers, the re-circulation of weapons from existing stockpiles, and the illicit manufacture of arms. "Legal" arms all too often end up on the hands of unauthorized recipients, who use them to violate human rights. "Legal" arms are also used illegally by agents of the State to violate human rights. Transnational networks of brokers, dealers, financiers and transporters are the key players in small arms markets, yet most States do not even register them, let alone require their deals to be licensed.

31. While, in general, experts agree that the increased availability of small arms has led to increased violations of human rights and humanitarian law, there has not yet been reliable and verified data collected on the number, profile and types of violations caused by small arms. Some of the obstacles to collecting statistics on the human rights and humanitarian impacts of small arms include lack of training and funding for researchers, lack of standardized definitions and methods, and security threats to data gatherers.[30]

32. Without such data, human rights fact-finders have not been able to analyse fully the role of small arms in human rights abuses. For purposes of illustration, for instance, the author analysed the "urgent appeals" and "communications sent" contained in the 2001 report of the Special Rapporteur on extrajudicial, summary or arbitrary executions (E/CN.4/2001/9/Add.1). The analysis revealed that in only 25 per cent (355 out of 1,425) of reported incidents was there even an indication that the violation resulted from the misuse of firearms. The Special Rapporteur identified the actual type of firearm used in very few cases. In 43 per cent (616 out of 1,425) of the reported incidents the report did not specify the cause and manner of death, or the "tools" used in the violation.

Incidents reported in the year 2000 by the Special Rapporteur on extrajudicial, summary or arbitrary executions, with reference to weapon used

Region	Shootings	Armed attacks	Unspecified	Torture and non-gun	Other	Total	% Armed	% Unspecified
Africa	60	1	234	45	46	386	16	61
Asia	80	36	86	173	47	422	27	20
Eastern Europe	7	5	52	12	0	76	16	68
Latin America	82	24	147	68	0	321	33	46
Middle East	60	0	97	16	46	219	27	44
Western Europe	0	0	0	1	0	1	0	0
Total	289	66	616	315	139	1 425	25	43

Note: Urgent appeals cases are based on incoming communications, so they do not necessarily reflect the level of killings in any particular country or region. Regional groups in the above chart are: AFRICA - Algeria, Angola, Burundi, Congo, Côte d'Ivoire. Democratic Republic of the Congo, Ethiopia, Gambia, Kenya, Namibia, Nigeria, Rwanda, Sudan, Tunisia, Zimbabwe. ASIA - Bangladesh, China, India, Indonesia, Myanmar, Nepal, Sri Lanka. EASTERN EUROPE - Russian Federation, Tajikistan, Uzbekistan. LATIN AMERICA - Bolivia, Brazil, Colombia, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Peru, Venezuela. MIDDLE EAST - Iran (Islamic Republic of), Israel, Jordan, Lebanon, Pakistan, Yemen, Palestinian Authority. WESTERN EUROPE - Spain.

33. While most arbitrary killings and other serious violations against the integrity of the person are believed to be committed or facilitated by persons carrying guns, the instruments used in the violations are almost never reported. The analysis of the report of the Special Rapporteur is just one example of the lack of attention given to the tools used to violate human rights. It appears as though small arms and light weapons are so common, and so expected, that in large part they are taken for granted, even by the human rights community.

34. Because of their lethality, small arms have the power to transform a basic violation of human rights into a profound one. With powerful firearms, a dispute can turn into a killing, an act of revenge can turn into a massacre. Researchers need to focus more on the relationship between arms availability and an increase in the numbers and gravity of human rights abuses. To facilitate further analysis of the issue, the author encourages all human rights fact-finders in the United Nations and in non-governmental organizations to undertake the collection and analysis of the number, type and profile of violations committed with small arms so that a clearer picture of the impact of these weapons will begin to emerge.

V. EXISTING HUMAN RIGHTS AND HUMANITARIAN NORMS RELEVANT TO THE AVAILABILITY AND MISUSE OF SMALL ARMS

35. The following analysis illustrates that States have existing obligations under international human rights and humanitarian law that limit to some extent their actions concerning the transfer and use of small arms. Some international obligations, such as the non-derogable requirement to protect the right to life under article 6 of the International Covenant on Civil and Political Rights, place absolute limitations on State actions involving weapons. Other obligations are less precise, but indicate evolving norms requiring (i) that States exercise due diligence by taking effective measures to prevent, prosecute and punish violations with small arms; (ii) that States take effective measures to prevent the transfer of small arms into situations where they are likely to be used to commit serious human rights abuses; and (iii) that non-State actors be held accountable for using small arms to violate fundamental principles of human rights and humanitarian law.

36. The following legal analysis will examine five different situations: (i) misuse of small arms by State agents; (ii) misuse of small arms by private persons when the State fails to exercise due diligence; (iii) misuse of small arms by State agents in armed conflict; (iv) misuse of small arms by non-State actors in armed conflict; and (v) small arms transfer with knowledge that arms are likely to be used to commit serious violations of international human rights and humanitarian law. While the primary purpose of international law is to prescribe the conduct of States, international law is evolving to account for the indisputable role of individuals and non-State actors in promoting and protecting human rights. The establishment of the International Criminal Court is the most obvious example of the trend towards developing international standards to complement national standards regarding the criminal actions of individuals and non-State actors. This trend is critical in any analysis of small arms - tools which enable individuals and organized groups to inflict tremendous violence upon people and communities. In addition to its analysis of State obligations, therefore, this working paper will examine existing legal obligations regarding arms-related violations perpetrated by individuals in situations not rising to the level of armed conflict, and by non-State actors in armed conflicts.

37. A summary of the author's analysis of human rights and humanitarian law obligations regarding small arms can be found in the chart in the annex to this working paper.

Misuse of small arms by State agents

38. States and their agents use small arms to violate fundamental human rights through actions such as intentional killings by security forces, excessive force by law enforcement, and disproportionately violent government reaction against internal disturbance. Small arms are also used to facilitate an entire range of human rights violations from rape, torture and forced displacement, to the deprivation of education and health care. The misuse of small arms to commit such violations is prohibited under existing international human rights law.

39. From its inception, the United Nations has been committed to the protection of the right to life, a right embodied in article 3 of the Universal Declaration of Human Rights and article 6 of the International Covenant on Civil and Political Rights. States may not derogate from

article 6, even in times of public emergency that threaten the life of the nation (art. 4 (2)). The State should not deprive an individual of life except pursuant to a final judgement by a competent court (art. 6 (2)).

40. The Human Rights Committee, which monitors the implementation of the Covenant, elaborated on the actions required of States to fulfil their obligations under article 6 in its General Comment 6, adopted in 1982: "... States parties should take measures not only to prevent and punish deprivation of life by criminal acts, but also to prevent arbitrary killing by their own security forces. The deprivation of life by the authorities of the State is a matter of the utmost gravity. Therefore, the law must strictly control and limit the circumstances in which a person may be deprived of his life by such authorities." (para. 3).

41. In a further articulation of the treaty obligations described above, the United Nations has adopted specific standards to govern the use of weapons by law enforcement. These standards include the Code of Conduct for Law Enforcement Officials, adopted by the General Assembly in 1979, which provides that "law enforcement officials may use force only when strictly necessary and to the extent required for performance of their duty" (art. 3). Officers should apply non-violent means as far as possible before resorting to the use of force.

42. The Basic Principles on the Use of Force and Firearms by Law Enforcement Officials, adopted by the Eighth United Nations Congress on the Prevention of Crime and the Treatment of Offenders in 1990, provide clear standards of State responsibility for the use of firearms by its agents. The Principles forbid the use of firearms except in self-defence or defence of others against imminent threat of death or to prevent the perpetration of a particularly serious crime (principle 9). Officers must identify themselves, give a clear warning of their intent to use firearms, with sufficient time for the warning to be observed, unless to do so would risk death or serious harm to officer or others (principle 10). The Principles set forth the responsibilities of States to provide training on the standards (principle 19), to punish law enforcement officials for arbitrary or abusive use of force and firearms (principle 7), and to assist victims and inform their families when firearms are used (principle 5). The Principles have not been well integrated into the domestic laws and practice of States.

43. Case law in the United Nations, the Inter-American system and the European Court of Human Rights further defines State obligations to take steps to prevent violations of the right to life through adequate training, policies and procedures.[31] The European Court of Human Rights imposes a positive duty on States to protect life. That Court stated in *McCann v. the United Kingdom*, that "the national law must strictly control and limit the circumstances in which a person may be deprived of his life by the State. The State must also give appropriate training, instructions and briefing to its soldiers and other agents who may use force and exercise strict control over any operations which may involve the use of lethal force".

Misuse of small arms by private persons when the State fails to exercise due diligence

44. There are more guns in the hands of private persons around the world than there are in the hands of State security forces.[32] Private individuals account for about 55 per cent of the total known global stockpile of firearms, a minimum of 305 million guns.[33] While the link between accessibility of guns and levels of violence is not absolute, research shows that, in general, high

rates of gun ownership are related to increases in the incidence of arms-related violence.[34] Such violence includes both intentional and unintentional deaths and injuries. Guns end up in the hands of private persons by various means, including direct commercial sales, private transfers, government sale or transfer, and failure to disarm in post-conflict situations.

45. The United Nations has expressed its concern over the high incidence of crimes, accidents and suicides involving the use of firearms, noting the lack of appropriate regulations in many countries for the possession and storage of firearms, and the lack of training on the use of firearms.[35] Several countries currently have extremely high firearm homicide rates. Among the countries with the highest firearm deaths per 100,000 are Colombia (55.85), Brazil (26.97), Jamaica (18.72), the United States (14.05), and Estonia (10.15).[36] Tragic incidents of firearm violence in various countries, particularly in schools, have drawn public attention to the problem, but these incidents represent only a small fraction of the deaths and injuries inflicted by individuals with easy access to guns.

46. Under international human rights law, the State is responsible for violations committed with small arms by private persons who, because they are operating with the express or implicit permission of authorities, are considered to be State agents. Under this theory, the State would be responsible for failing to prevent, investigate or prosecute vigilante groups or private militias that carry out ethnic or religious massacres, or "social cleansing" of street children. There is also growing pressure to hold States accountable for patterns of abuses, such as the State's failure to establish reasonable regulation regarding the private ownership of small arms that are likely to be used in homicides, suicides and accidents; its failure to protect individuals from a pattern of domestic violence; and its failure to protect individuals from organized crimes including kidnapping and killing for ransom.

47. Article 3 of the Universal Declaration of Human Rights and article 6 of the International Covenant on Civil and Political Rights have been interpreted as requiring States to prevent acts of violence, including extrajudicial, summary or arbitrary executions, by private persons. Evidence of this interpretation can be found in the mandate of the Special Rapporteur on extrajudicial, summary or arbitrary executions which authorizes her to intervene in cases where the authorities have failed to take effective or meaningful action to prevent extrajudicial killings from taking place (see E/CN.4/2001/9, para. 7).

48. The Special Rapporteur on violence against women has been a particularly vocal proponent of the position that States must take reasonable measures to protect the fundamental rights of those within its jurisdiction from abuses by non-State actors. Private persons committing acts of violence against women frequently use firearms to carry out their abuses. In her analysis of the State's responsibility for violence against women, the Special Rapporteur noted that "States are held legally responsible for acts or omissions of private persons in the following instances: (a) the person is an agent of the State; (b) private acts are covered by provisions of a treaty obligation; (c) there is State complicity in the wrongs perpetrated by private actors; (d) State failure to exercise due diligence in the control of private actors" (E/CN.4/1995/42, para. 102). The "due diligence" standard has been generally accepted as a measure of evaluating a State's responsibility for violation of human rights by private actors (ibid).

49. In her 1996 report, the Special Rapporteur elaborated on this principle, noting that "a State can be held complicit where it fails systematically to provide protection from private actors who deprive any person of his/her human rights" (E/CN.4/1996/53, para. 32). According to the Special Rapporteur, "Complicity must be demonstrated by establishing that the State condones a pattern of abuse through *pervasive non-action* ... To avoid such complicity, States must demonstrate due diligence by taking active measures to protect, prosecute and punish private actors who commit abuses" (ibid., para. 33; emphasis added). Under this line of reasoning, it could be argued that due diligence to prevent the abuse of fundamental human rights, including the right to life, requires that a State enact reasonable regulations to limit the availability and misuse of small arms by individuals within its jurisdiction.

50. The due diligence requirement under customary international law has been expanded by international and regional human rights conventions and regional judicial decisions. For example, in the 1988 *Velasquez* case, the Inter-American Court of Human Rights imposed liability on Honduras for its lack of due diligence in preventing unexplained "disappearances", whether by the State or private actors.[37] In *Akkok v. Turkey*, the European Court of Justice held that the State violated article 2.1 of the European Convention on Human Rights[38] when it failed to take reasonable measures to avert a real and immediate risk to life. The victim, Mr. Akkok, was a Kurdish teacher who was shot and killed by unknown assailants. Mr. Akkok had received death threats before he was killed and had reported those threats to the Turkish authorities. The Court interpreted article 2.1 as involving a primary State duty to secure the right to life by putting in place effective criminal law provisions to deter crimes. The Court found that the right to life under the European Convention imposed a positive obligation on authorities to take preventive operational measures to protect an individual whose life is at risk from the criminal acts of another individual.

51. Further insight on a State's obligation regarding the acts of private persons can be found in the Declaration on the Right and Responsibility of Individuals, Groups and Organs of Society to Promote and Protect Universally Recognized Rights and Fundamental Freedoms. According to article 2 of the Declaration, States have the primary responsibility to protect, promote and implement all human rights and States are responsible for establishing the necessary social, economic and political conditions, as well as legal guarantees, to ensure that all persons under their jurisdiction, individually and in association with others, are able to enjoy all those rights in practice. Each State must adopt legislative, administrative and other steps necessary to ensure that rights are guaranteed.

Misuse of small arms by State agents in armed conflict

52. According to many, today's weapons of mass destruction are not only nuclear or biological. They are also the hundreds of thousands of small arms that fuel armed conflicts.[39] Since the end of the cold war, the nature of armed conflict has changed dramatically. The withdrawal of military and economic support from super-Powers forced many Governments and armed groups to become more self-reliant in military and economic concerns. Major weapons transfers, including small arms transfers, once motivated by strategic geopolitical decisions, became increasingly a function of economics. Cheaply produced small arms were seen as a lucrative export for nations in need of cash. As sources of small arms manufacturing multiplied,

so did easy access to lethal weapons for deadly conflicts around the globe. Newly manufactured as well as recirculated small arms fuelled internal and international armed conflicts. In many of today's conflicts, armed groups specifically target civilians and civilian infrastructure to further their military and political ends.

53. While all sides of these armed conflicts carry out abuses with small arms, this paper will first review the State's responsibility for small arms-related violations in international and internal conflicts. In the course of international conflicts, States are known to carry out grave violations of human rights and humanitarian law with small arms. The vast majority of armed conflict since the Second World War, however, has taken place within, and not across, borders. It is in these internal conflicts that small arms have had their primacy; they are used to commit widespread atrocities against civilians and non-combatants. Examples of arms-related violations by States include: committing executions or torture of non-combatants and prisoners of war; attacking peacekeepers and humanitarian workers; committing atrocities against civilian populations in situations of occupation; forcibly relocating civilian populations; exploiting children into using small arms as child soldiers; targeting civilian supporters of opposition groups; using weapons that cause superfluous injury or unnecessary suffering; and using excessive and indiscriminate force in efforts to counter armed insurgents such as summary executions of captured combatants.

54. International humanitarian law defines the rights and duties of belligerents and provides safeguards for persons not participating in armed conflict. While human rights law generally seeks to protect individuals from abusive State action, humanitarian law was initially developed to regulate the relationship between two States, or generally equal parties.[40] Humanitarian law has taken steps to adapt to the exigencies of contemporary internal conflicts. The nature of these internal conflicts has changed the very targets of war from belligerent military opponents to the civilian communities that support and sustain them.

55. Internal conflicts pose the most significant legal and pragmatic challenges for those seeking to protect the lives of civilians. Because of the threshold determination regarding the status of the belligerents, there are obstacles to applying both international human rights and humanitarian law to non-international conflicts.[41] Under current international legal practice, however, the distinction between inter-State wars and civil wars is diminishing. In the *Tadic Interlocutory Appeal* in the International Criminal Tribunal for the Former Yugoslavia, for instance, the court stated: "Why protect civilians from belligerent violence, or ban rape, torture or the wanton destruction of hospitals, churches, museums or private property, as well as proscribe weapons causing unnecessary suffering when two sovereign States are engaged in war, and yet refrain from enacting the same bans or providing the same protection when armed violence has erupted 'only' within the territory of a sovereign State?"[42]

56. The primary sources of international humanitarian law relating to small arms include the St. Petersburg Declaration of 1868 (banning certain explosive projectiles because they uselessly increased suffering or rendered death inevitable); The Hague Conventions of 1899 and 1907 (establishing the rights and duties of formal belligerents in their military operations and limiting the choice of methods and means of injuring the enemy in an international armed conflict); the four Geneva Conventions of 1949 (offering legal protection to victims of war and providing

safeguards for persons not taking part in the hostilities); and the two Additional Protocols to the Geneva Conventions adopted in 1966 and entered into force in 1977 (extending the provisions of the Conventions to victims of international and non-international armed conflict).

57. The cardinal principles of international humanitarian law are: (i) the protection of civilian populations and civilian objects and the distinction between combatants and non-combatants; and (ii) the prohibition on causing unnecessary suffering to combatants. States do not have unlimited freedom of choice of means in the weapons they use.[43] The body of international humanitarian law also prohibits the use and transfer of certain weapons, such as blinding laser weapons and anti-personnel landmines. To the extent that small arms availability facilitates the violations of these cardinal principles, the international community has an obligation to take steps to stem the flow of such arms.

58. The Martens clause of The Hague Convention of 1899 provided a bottom line for the treatment of civilians and non-combatants in situations of armed conflict. The Martens clause was restated in Additional Protocol I of 1977, article 1, paragraph 2: "In cases not covered by this Protocol or by other international agreements, civilians and combatants remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience."

59. States have an obligation not to use small arms to commit grave breaches of the four Geneva Conventions, including wilful killing, torture or inhuman treatment, including biological experiments, wilfully causing great suffering or serious injury to body or health, unlawful deportation or transfer of a protected person and extensive destruction and appropriation of property not justified by military necessity and carried out unlawfully and wantonly.

60. Common article 3 of the Geneva Conventions is the keystone of humanitarian law applicable in all armed conflicts. It requires humane treatment of non-combatants, specifically prohibiting violence to life and person, in particular murder, mutilation, cruel treatment and torture. The Rome Statute of the International Criminal Court restates customary international human rights norms, prohibiting crimes against humanity in peacetime or wartime (art. 7), as well as war crimes in both international and internal conflicts (art. 8).

61. **To ensure that their forces abide by obligations of international humanitarian law, States must undertake efforts to teach and promote respect for the law so that the bearers of arms understand basic rules and realize that they are expected by their own communities to observe those rules.**

62. In addition to limitations under international humanitarian law on the use of small arms, States have responsibilities under international human rights law. Even during armed conflict, the International Covenant on Civil and Political Rights protects the right to life under article 6. This non-derogable right applies regardless of the status of the victim under international law.[44]

63. In addition to the non-derogable norms protecting the right to life and freedom from torture even in wartime, the Convention on the Rights of the Child, article 38, prohibits the recruitment of children under 15 into the armed service and from taking part in direct hostilities.

The recently adopted Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict raised the minimum age to 16 for voluntary recruitment and to 18 for participation in direct hostilities and States parties to the Optional Protocol must abide by the higher age restrictions.

Misuse of small arms by non-State actors in armed conflict

64. The nature of internal armed conflict today is characterized by the involvement of a wide range of actors, including rebel and paramilitary group and criminal organizations - all of whom use small arms as their weapons of choice. Most of these non-State actors would not be able to assume any position of strength without easy access to small arms. In some areas, armed groups control significant geographic territory and serve functionally as governments over that territory. In many other situations, however, weapons are distributed among undisciplined groups, including children.

65. The accountability and obligations of armed opposition groups with regard to violations of international human rights and humanitarian law is a legal area that is still in an early phase of development. There is no international body explicitly mandated to monitor compliance with principles of international law by non-State armed groups.[45]

66. The international community has begun to recognize the serious humanitarian and national security consequences and threats to security resulting from the availability of small arms to non-State actors. The Programme of Action adopted by the United Nations Conference on the Illicit Trade in Small Arms and Light Weapons in All Its Aspects was, in large part, an effort by States to control the production, export, import, transit or retransfer of small arms and light weapons and to keep these weapons out of the hands of non-State actors. In fact, many Governments participating in the Conference advocated a ban on transfers to non-State actors, but their proposals failed to achieve the required consensus.

67. Non-State actors use small arms to commit serious human rights violations, including genocide; mass killings; systematic rape; attacks on civilians, peacekeepers and humanitarian workers; exploitation of children by forcing them to use small arms as soldiers; forced transfer of populations; hostage-taking; and terrorism. These violations are prohibited under common article 3 of the Geneva Conventions. Common article 3 applies to all parties to a conflict, including non-State actors, and obligates them to treat non-combatants humanely, prohibiting violence to life and person, the taking of hostages and outrages upon personal dignity, including humiliating and degrading treatment. Additional Protocol II to the Geneva Conventions develops and supplements common article 3 in situations involving a State's armed forces and one or more opposition groups. Additional Protocol II does not apply to conflicts solely involving non-State armed groups, or to conflicts where the armed opposition does not exercise a degree of territorial control.[46]

68. There have been different theories proposed as to how non-State actors might be bound under customary norms of international humanitarian law. In cases where groups exercise sufficient control over a geographic territory, their obligations arise from their position as a de facto governing authority. As for groups that do not control territory, some argue that they

are bound based on their status as citizens of a State party. Others adhere to the argument that Additional Protocol II is an extension of the principles contained in common article 3, which applies to all parties to a conflict; therefore, it is intended to apply to both States and non-State actors.[47]

69. The provisions of the Rome Statute of the International Criminal Court also apply to all individuals, whether acting as State or non-State actors. The Rome Statute prohibits crimes against humanity in peacetime or wartime as well as war crimes in both international and internal conflicts. In fact, many commentators have noted the increasing convergence between human rights and humanitarian law, attributed to the influence that the human rights movement has had on the laws of war.[48] This convergence, referred to by some as the "humanization of humanitarian law", is reflected in the jurisprudence of the international tribunals. The non-derogable rights set forth in article 4 of the Civil and Political Covenant represent the core of overlapping rights protected under both human rights and humanitarian law. There remain, however, significant differences between the two bodies of law, since international humanitarian law seeks to place limits on the conduct of warring parties but, within these limits, it does not prohibit killing or suffering per se.[49] It is worth noting that the ICRC, among others, has drawn attention to the risk that widespread arms availability might jeopardize the entire fabric of international humanitarian law, which is based on the assumption that the holders of military-style weapons possess a minimum level of training, discipline and control.[50]

Small arms transfer with knowledge that arms are likely to be used to commit serious violations of international human rights and humanitarian law

70. One of the pressing unexamined questions regarding arms availability is the legal responsibility of States that transfer small arms into situations where those arms are likely to be used to commit serious violations of international human rights or humanitarian law. With the exception of specific arms embargoes imposed by the Security Council, there are no binding international standards that prohibit State-authorized transfers of arms for atrocities. Because it is largely free of international control, the current pattern of transfers of small arms, light weapons and related ammunition is a matter of urgent humanitarian and human rights concern.

71. **While primary responsibility for compliance with international humanitarian law falls upon small arms' users, States and private companies engaged in production and export bear a degree of political, moral and, in some cases, legal responsibility toward the international community for the use made of their weapons and ammunition. The responsibilities of arms transferors need to be spelled out in a more coherent fashion by the international community.**

72. There are some limitations under international law regarding arms transfers from one State to insurgent forces in another. International law prohibits States from interfering directly or indirectly in the internal or external affairs of any other State.[51] This prohibition applies to the transfer of small arms to subversive, terrorist or armed activities.[52] In the *Nicaragua Case*, the International Court of Justice found that by training, arming, equipping, financing and supplying an insurgent military force against Nicaragua, the United States had acted in breach of the

customary law not to intervene in the affairs of another State.[53] One region, the European Union, under the EU Joint Action on Small Arms, prohibits the transfer of military-style small arms to sub-State or non-State actors.[54]

73. As for State-to-State transfers of small arms, States are prohibited from aiding another State in the commission of internationally wrongful acts. That prohibition could be invoked in situations where a transferring State supplies small arms to another State with knowledge that those arms are likely to be used in a violation of human rights or humanitarian law. In 2001, the International Law Commission stated in its Draft articles on Responsibility of States for Internationally Wrongful Acts:

> "Article 16: Aid or assistance in the commission of internationally wrongful act
>
> A State which aids or assists another State in the commission of an internationally wrongful act by the latter is internationally responsible for doing so if:
>
> (a) That State does so with knowledge of the circumstances of the internationally wrongful act; and
>
> (b) The act would be internationally wrongful if committed by that State."[55]

The effect of this principle is to prohibit States from transferring small arms to another State knowing that the other State will use the arms in violation of international law. Some regions have already adopted human rights criteria to limit State-to-State transfers of small arms.[56]

74. States do have important obligations under international human rights and humanitarian law that could be interpreted to prohibit them from transferring small arms knowing they will be used to violate human rights. Specifically, common article 1 of the Geneva Conventions obligates States "to respect and ensure respect" for international humanitarian law. By knowingly providing arms in situations where there are likely to be violations of international humanitarian law, States are acting in breach of their duty to ensure respect for humanitarian law as required by article 1.[57] This obligation needs to be elaborated further by the international community.

75. The ICRC has recommended, for instance, the development of national and international codes of conduct limiting arms transfers based on indicators of respect for international humanitarian law. By articulating clear references to international humanitarian law, such codes would aim to reduce the availability of small arms for State and non-State actors who use them to commit atrocities.[58] The Framework Convention on International Arms Transfers is one noteworthy example of such a draft international code; it attempts to bring together existing international legal principles regarding the transfer of arms. The Framework Convention proposes to limit the transfer of arms based on certain established criteria, including respect for international human rights and humanitarian law.

VI. RECOMMENDATIONS FOR FURTHER ACTION AND RESEARCH

76. The proliferation and availability of military-style and other small arms is taking a tremendous human toll. Small arms are used to violate, directly and indirectly, the entire spectrum of human rights. States have begun to take steps to address the illicit transfer of small arms, but there is a pressing need to act to address the human security issues that arise out of the availability and misuse of these lethal weapons. The need to improve the protection of civilians, especially vulnerable persons, who are at risk of gun violence should be the overriding concern. The Sub-Commission can play an important role in articulating what steps need to be taken by States with regard to small arms to comply with their international human rights and humanitarian obligations, specifically to protect the non-derogable right to life. International human rights mechanisms have paid attention to the underlying violations but not to the significance of the tools used to commit those violations.

77. The above analysis indicates that there are evolving norms of international human rights and humanitarian law that require States to exercise due diligence by (i) taking effective measures to prevent, prosecute and punish violations with small arms within their jurisdiction, and (ii) taking effective measures to prevent the transfer of small arms to human rights abusers. In addition, international human rights and humanitarian law are evolving to address the accountability of non-State actors for major abuses, including abuses committed with small arms.

78. To begin to fill out the parameters of those evolving norms, the human rights community needs to gather and analyse data on the use of small arms and light weapons in human rights violations. The following recommendations suggest initial steps towards addressing the human rights dimensions of the availability and misuse of small arms.

(a) United Nations human rights bodies should encourage States to adopt national laws regarding small arms that bring them into compliance with international human rights and humanitarian law norms. Specifically, all States should incorporate into their own laws the Basic Principles on the Use of Force and Firearms by Law Enforcement. The Office of the High Commissioner for Human Rights, in cooperation with the Commission on Crime Prevention and Control, should provide technical assistance to States expressing interest in incorporating the Basic Principles into their domestic law;

(b) United Nations human rights bodies should encourage States to provide training to armed forces and law enforcement on basic principles of international human rights and humanitarian law especially with regard to weapons use, and to investigate and prosecute individuals who violate those principles;

(c) Special rapporteurs, who are entrusted by the Commission on Human Rights with the investigation of State practices regarding human rights, should seek out information and report specifically on human rights abuses committed with small arms and light weapons. The Special Rapporteur on extrajudicial, summary or arbitrary executions, in particular, should track in her annual report information regarding the cause and manner of death, and the type of weapons used in reported killings;

(d) The Human Rights Committee that implements the Civil and Political Covenant should consider drafting a General Comment under article 6 of that Covenant regarding the responsibilities of States to use due diligence to reduce the misuse of small arms and light weapons and to prevent their transfer into situations where they are likely to be used to commit serious human rights violations;

(e) The Human Rights Committee that implements the Civil and Political Covenant should ask States to report on what steps they have taken (1) to bring their law enforcement agencies into compliance with the United Nations Basic Principles on the Use of Force and Firearms by Law Enforcement; (2) to prevent, prosecute and punish private actors who commit abuses; and (3) to prevent the transfer of small arms to human rights abusers by the State or private actors within its jurisdiction.

(f) All United Nations human rights treaty bodies should inquire, as part of the State reporting procedure, about transfers and misuse of small arms and light weapons that violate the treaty obligations of States Parties.

79. Because of the inherent lethality of small arms and light weapons, the availability and misuse of such weapons has an indisputable impact on the number, type and gravity of violations of international human rights and humanitarian law committed by State and non-State actors. The Sub-Commission should therefore consider requesting the Commission on Human Rights to authorize a full study on the issues involved in human rights violations with small arms and light weapons.

Notes

[1] International Committee of the Red Cross, Arms Availability and the Situation of Civilians in Armed Conflict, Geneva, 1999, p. 13 [hereinafter "ICRC Arms Availability Report"].

[2] Graduate Institute of International Studies, Small Arms Survey 2001: Profiling the Problem, Oxford University Press 2001, p. 59 [hereinafter "Small Arms Survey 2001"]. The figure of 500,000 deaths from small arms represents approximately 300,000 killed in armed conflict and 200,000 killed in peacetime each year.

[3] Robin Coupland and David Meddings, "Mortality Associated with the Use of Weapons in Armed Conflicts, Wartime Atrocities and Civilian Mass Shootings: Literature Review", British Medical Journal, vol. 319, 1999, pp. 407-410 (study confirmed that the number of people injured in conflicts is usually two to three times the number killed); World Health Organization, Small Arms and Global Health, Geneva, 2001, p. 13 (in situations of non-conflict like the United States, there is a 1:3 ratio of killed to non-fatally-injured victims).

[4] ICRC Arms Availability Report, p. 16.

[5] Ibid.

[6] Coupland and Meddings, op. cit.

[7] Peter Salama, Bruce Laurence and Monica Nolan, "Health and Human Rights in Contemporary Humanitarian Crises: Is Kosovo More Important than Sierra Leone?", British Medical Journal, vol. 319, 1999, pp. 1569-1571.

[8] See, e.g., Pirseyedi, The Small Arms Problem in Central Asia, UNIDIR, 2000; United Nations, The Impact of Armed Conflict in Children: A critical review of progress made and obstacles encountered in increasing protection for war-affected children, United Nations, 2000, p. 34 [hereinafter, "The Machel Review"].

[9] Pablo Fajnzylber, Daniel Lederman and Norman Loazya, "Crime and Victimization: An Economic Perspective", Economia, vol. 1 No. 1, 2000, pp. 219-278.

[10] Robert Muggah and Eric Berman, Humanitarianism Under Threat: the Humanitarian Impacts of Small Arms and Light Weapons, (Geneva: Small Arms Survey, 2001), pp. 3-4. In this study, commissioned by the Reference Group on Small Arms of the United Nations Inter-Agency Standing Committee, the researchers found that in the cases of Columbia, East Timor and Kenya, forced displacement is influenced by even a subjective perception of firearms-related violence.

[11] Ibid., p. ix.

[12] Small Arms Survey, 2001, p. 227.

[13] Kathi Austin, "Armed Refugee Camps as a Microcosm of the Link Between Arms Availability and Insecurity", 2002, p. 1, unpublished paper available from the author. The paper was a case study on the problem of arms flows, availability and impacts associated with the Dadaab refugee camps in north-eastern Kenya.

[14] The Machel Review, p. 5.

[15] Ibid., p. 33.

[16] Robert Muggah, "Caught in the Crosshairs: The Humanitarian Impact of Small Arms", draft chapter for Small Arms Survey, 2002, p. 9.

[17] Muggah and Berman, Humanitarianism Under Threat, pp. 4-5, the United Nations does not keep statistics on which direct injuries were suffered as a result of armed violence.

[18] Kofi Annan, "We the Peoples": The Role of the United Nations in the 21st century, United Nations, New York, 2000, p. 52.

[19] Muggah, Caught in the Crosshairs, pp. 46-51.

[20] Ibid.

[21] See, e.g. the report of the Panel of Experts established pursuant to Security Council resolution 1237 (1999) on violations of sanctions against UNITA ("Fowler Report") (S/2000/203), 10 March 2000.

[22] Arias Foundation for Peace and Human Progress, The Framework Convention on International Arms Transfers, 19 April 2002, at http://arias.or.cr/documentos/armslaw/FrameworkConvention.english.pdf.

[23] Joint Action of 17 December 1998 adopted by the Council on the basis of article J.3 of the Treaty on European Union on the European Union's contribution to combating the destabilizing accumulation and spread of small arms and light weapons (1999/34/CFSP), art. 3 (b).

[24] See European Union, Code of Conduct for Arms Exports, 8 June 1998, Criterion Two.

[25] Joost Hiltermann, "A Human Rights and Humanitarian Perspective", (Washington: Human Rights Watch), November 2001, p. 2.

[26] European Union, Code of Conduct for Arms Exports.

[27] OSCE, FSC.DOC/1/100, 24 November 2000.

[28] ECOWAS, Declaration of a Moratorium on Importation, Exportation and Manufacture of Light Weapons in West Africa (1998). ECOWAS heads of State detailed the type of weapons covered in the moratorium and the methods of implementation in a 1999 Code of Conduct.

[29] OAS, Model Regulations for the Control of the International Movement of Firearms, Their Parts, Components and Ammunition, AG/RES.1543 (XXVIII-0/98), June 1998.

[30] Muggah, Caught in the Crosshairs, p. 5.

[31] See, e.g., Human Rights Committee, General Comment 6, article 6 (sixteenth session, 1982), *Velasquez Rodriguez v. Honduras*, 4 Inter-Am.C.H.R. (Ser. C.) (1988) [hereinafter "Honduras Case"]; *Kaya v. Turkey*, Eur. Ct. H.R. (1998); *McCann and Others v. the United Kingdom*, Eur. Ct. H.R. (1994).

[32] Small Arms Survey 2001, pp. 88-89. This section of the working paper reviews the human rights obligations of States as they apply to the misuse of small arms by private persons during peacetime. Subsequent sections will discuss legal standards regarding organized non-State actors, such as armed militia groups, in the context of armed conflict.

[33] Ibid.

[34] See generally, Small Arms Survey, p. 202-03 (citing studies by Miller and Cohen, 1997; Van Dijk, 1997; Wintemute et al., 1999; Centers for Disease Control and Prevention, 1997; Kellerman, 1993).

[35] *United Nations International Study on Firearm Regulation*, United Nations Publication, Sales No. E.98.XIV.2, p.1.

[36] Ibid., pp. 108-109.

[37] Honduras Case, para. 102-04.

[38] Article 2.1 of the European Convention on Human Rights provides: "Everyone's right to life shall be protected by law. No one shall be deprived of his life intentionally save in the execution of a sentence of a court following his conviction of a crime for which this penalty is provided by law."

[39] The Machel Report, p. 34.

[40] Theodor Meron, "The Humanization of Humanitarian Law", *American Journal of International Law*, vol. 94, 2000, p. 240.

[41] See, e.g., David Petrasek, "Moving Forward on the Development of Minimum Humanitarian Standards", *American Journal of International Law*, vol. 92, 1998, p. 561.

[42] International Tribunal for the Prosecution of Persons Responsible for Serious Violations of International Humanitarian Law committed on the Territory of Former Yugoslavia since 1991, *Prosecutor v. Dusko Tadic*, Case No. IT-94-1-AR72, 2 October 1995.

[43] *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion of 8 July 1996, I.C.J. Reports 1996,* para. 75.

[44] Françoise Hampson, "Using International Human Rights Machinery to Enforce the International Law of Armed Conflicts", Revue de Droit Militaire et de Droit de la Guerre, vol. 30, 1991, p. 119.

[45] Camilla Waszink, "The Use of Small Arms in Internal Conflicts: How to Make Armed Opposition Groups Accountable", unpublished paper, 2002, available from author.

[46] Ibid.

[47] See, e.g., Antonio Cassese, "The Status of Rebels under the 1977 Geneva Protocol on Non-International Conflict", International and Comparative Law Quarterly, No. 30, 1981, pp. 416-39.

[48] See, especially, Meron, op. cit.

[49] Waszink, op. cit.

[50] ICRC, Arms Availability Report, at p. 10.

[51] See Declaration on the Inadmissibility of Intervention in the Domestic Affairs of States and Protection of their Independence and Sovereignty, General Assembly resolution 2131 (XX) of 21 December 1965.

[52] See also Declaration on the Enhancement of the Effectiveness of the Principle of Refraining from the Threat or Use of Force in International Relations, General Assembly resolution 42/22 of 18 November 1987, annex, para. 6.

[53] *Military and Paramilitary Activities in and against Nicaragua, Nicaragua v. United States of America, Judgment of 27 June 1986, I.C.J. Reports 1986*.

[54] European Union Joint Action, at article 3 (b).

[55] Official Records of the General Assembly, fifty-sixth session, Supplement No. 10 (A/56/10), Chap. IV.E.1.

[56] European Union, Code of Conduct for Arms Experts, Criterion Two.

[57] ICRC Arms Availability Report, p. 64; Emanuela Gillard, "What is legal? What is illegal? Limitations on Transfers of Small Arms under International Law", Lauterpacht Research Centre for International Law, Cambridge, 29 April 2002, at http://www.arias.or.cr/fundarias/cpr/armslaw/egillard.html.

[58] ICRC Arms Availability Report, p. 65.

Annex

Selected sources of international human rights and humanitarian law that limit the transfer and misuse of small arms and light weapons

Situation	Examples of violations	Applicable law
1. Misuse of small arms by State agents	– Genocide – Intentional killings by security forces – Excessive force by law enforcement – Disproportionately violent government reaction to disturbances – Systematic rape – Torture – Forced displacement – Deprivation of basic human needs	– Universal Declaration of Human Rights, art. 3 – International Covenant on Civil and Political Rights (ICCPR), art. 4 (2) – ICCPR, art. 6 – Convention on the Prevention and Punishment of the Crime of Genocide ("Genocide Convention") – Code of Conduct for Law Enforcement Officials, art. 3 – Basic Principles on the Use of Force and Firearms by Law Enforcement Officials
2. Misuse of small arms by private persons when the State fails to exercise due diligence	– Ethnic, religious, or social massacres – Failure to prevent criminal homicide – Failure to prevent domestic violence – Failure to prevent crimes committed post-conflict by individual owners of small arms – Terrorism	– Universal Declaration of Human Rights, art. 3 – ICCPR, art. 6 – "Due diligence" standard, Inter-American Court of Human Rights, European Court of Human Rights – Declaration on the Right and Responsibility of Individuals, Groups and Organs of Society to Promote and Protect Universally Recognized Rights and Fundamental Freedoms, art. 2 (1), 2 (2)

Situation	Examples of violations	Applicable law
3. Misuse of small arms by State agents in armed conflict	– Genocide – Committing executions or torture of non-combatants and prisoners of war – Attacking peacekeepers and humanitarian workers – Committing atrocities against civilian populations in situations of occupation – Forcibly relocating civilian populations – Using weapons that cause superfluous injury or unnecessary suffering – Using excessive and indiscriminate force in efforts to counter armed insurgents such as summary executions of captured combatants – Exploitation of children as soldiers – Indiscriminate use of weapons – Use of weapons that cause superfluous injury or unnecessary suffering – Crimes against humanity, and war crimes	– Treaty bans on specific weapons: St. Petersburg Declaration (1869) (exploding projectiles) – The Hague Declaration (1899) (dum dum bullets) – Geneva Conventions of 1949, common article 3 – Additional Protocol II to the Geneva Conventions, and relating to the Protection of Victims of Non-International Armed Conflicts – Genocide Convention – Rome Statute of the International Criminal Court – ICCPR, arts. 6, 7 – Convention on the Rights of the Child, art. 38 – Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict

Situation	Examples of violations	Applicable law
4. Misuse by non-State actors in armed conflict	– Genocide – Mass killings – Systematic rape – Attacks on civilians, peacekeepers and humanitarian workers – Exploitation of children as soldiers – Forced displacement of populations – Hostage-taking – Terrorism	– Geneva Conventions of 1949, common article 3 – Additional Protocol II to the Geneva Conventions, and relating to the Protection of Victims of Non-International Armed Conflicts – Genocide Convention – Rome Statute of the International Criminal Court
5. Arms transfer with knowledge that arms are likely to be used to commit serious violations of international human rights and humanitarian law	– Violation of Security Council arms embargo – Transfer to insurgent group in another State – Transfer to a State identified as having a consistent pattern of gross and reliably attested violations of human rights and fundamental freedoms – Transfer to a State that uses child soldiers – Transfer to a State unable to control post-conflict violence – Transfer to a State known to violate international humanitarian law norms in situations of armed conflict	– Charter of the United Nations, Chapter VII (arms embargoes) – Geneva Conventions of 1949, common article 1 – United Nations Declaration on the Inadmissibility of Intervention in the Domestic Affairs of States and Protection of Their Independence and Sovereignty – Declaration on the Enhancement of the Effectiveness of the Principle of Refraining from the Threat or Use of Force in International Relations – International Law Commission, Draft articles on Responsibility of States for Internationally Wrongful Acts